UNITED
NATIONS

E

Economic and Social Council

Distr.
GENERAL

E/1993/50
15 January 1993

ORIGINAL: ENGLISH

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Substantive session of 1993

## SOCIAL DEVELOPMENT

## 1993 Report on the World Social Situation*

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* The present document is an advance version of the 1993 Report on the World Social Situation. The final report will be issued as a United Nations publication.

# Preface

The 1993 Report on the World Social Situation is the thirteenth in a series of reports on the subject dating to 1952. The report is prepared every four years in accordance with the wishes of the Commission for Social Development, which were endorsed by the Economic and Social Council in resolution 1985/21.

The Economic and Social Council, in resolution 1989/72, requested the Secretary-General, in preparing the next report, to give high priority to an analysis of the main indicators of social progress and standards of living, and to make a comprehensive analysis of the main causes and circumstances that explain negative trends in these indicators; chapters devoted to the study of specific social problems must be related to the global economic and social situations, taking into account both national and international conditions. In resolution 44/56, the General Assembly endorsed that request.

The Commission for Social Development, at its twenty-ninth session, concluded that it should have before it a draft framework of each forthcoming report on the world social situation, to allow it to make suggestions in regard to the preparation of the report. A draft framework for the 1993 report on the world social situation was before the Commission at its thirty-second session as an annex to the interim report of the Secretary-General on the world social situation (A/46/56-E/1991/6 and Corr.1). The Commission reviewed the draft framework.

The Economic and Social Council, in resolution 1991/4, reaffirmed the requests it had made in resolution 1989/72 concerning the preparation of the 1993 report, and requested the Secretary-General to reorient the draft framework for the 1993 report so that it would be in consonance with those requests, and to submit it to the Council for consideration at its regular session of 1992. The General Assembly, in resolution 46/95, endorsed the Council's request and requested the Secretary-General, in preparing the 1993 report, to take into account the intrinsic relationship between economic growth and social development and to analyse in depth the economic problems of the developing countries and the impact of those problems on the world social situation. The General Assembly recommended that the draft of the 1993 report be reviewed by the Administrative Committee on Coordination (ACC) to ensure that an integrated interdisciplinary focus was given and to provide a source of information for the report. An expanded outline of the report was submitted to the ACC Task Force on Long-term Development Objectives (Geneva, 3-12 March 1992).

The Economic and Social Council, in resolution 1992/26, having considered the reoriented draft framework, reaffirmed the request set forth in its resolution 1989/72. The Council requested the Secretary-General, in preparing the 1993 report, also to take into account the intrinsic relationship between economic growth and social development and to analyse in depth the impact of the economic problems of the developing countries on the world social situation. The Council requested the Secretary-General to submit to the General Assembly at its forty-eighth session, through the Economic and Social Council, the 1993 report on the world social situation.

The General Assembly, in resolution 44/54, requested the Secretary-General, when elaborating the next report on the world social situation, to take due account of the effects of science and technology on processes of social welfare and development on the basis of information available from Governments and from organizations of the United Nations system. In resolution 44/57 on the implementation of the Declaration on Social Progress and Development, the General Assembly requested the Secretary-General to include in the 1993 report on the world social situation a special section dealing with the activities carried out in pursuance of the resolution. Annex I to the present report responds to that request. In addition to these mandates and requests, there was a wealth of suggestions made by delegations in the course of debates in the General Assembly, the Economic and Social Council and the Commission for Social Development and in several written communications sent to the Department of Economic and Social Development.

There is unprecedented interest in questions of social development, as is evident in the decision to convene a World Summit for Social Development in 1995 (General Assembly resolution 47/92). This heightened interest is in response to marked changes in the world social and political situations and changes in priorities among policy makers.

The outstanding economic and social problem in the world is that of poverty. Persistent economic stagnation and decline in Africa for over two decades have drawn down living conditions to unacceptably low levels. Economic stagnation and problems of adjustment during the 1980s contributed to poverty in that region. Economic growth and appropriate policies have made a dent on the problem of poverty in Asia, where most of the poor live. In the economies in transition, substantial groups of people have fallen into conditions of poverty. Economic outcomes have widened differences in levels of income and welfare both among households and economies. Persistently high levels of unemployment in developed economies and low productivity employment in developing economies have prevented people from rising from poverty.

Economic difficulties and a general tendency to limit the role of government have created special difficulties for Governments seeking to provide social services. Policies and programmes to alleviate hunger, improve health conditions, provide education and raise the quality of housing and sanitation have run into the barriers of resource constraints. The widespread increase of the AIDS epidemic has created enormous problems and made large claims on resources. Patterns of government expenditure have been distorted by the need to service large public debts, both domestic and foreign.

Economic, political and social institutions have come under severe strain. In the formerly centrally planned economies, entirely new institutional frameworks are being set up. In developing countries, there has been a widespread move to establish more democratic forms of government. In all societies, the role of government is being re-evaluated. In the new circumstances of poverty, unemployment and the ageing of populations, social security measures have again come under scrutiny.

Rapid population growth and urbanization continues to be of heightened concern. International migration has raised new responses from native populations who are themselves in difficult economic circumstances. Refugees and displaced persons have appeared in new places and in large numbers, just as the intensity of the problem was being eased in other places. Ethnic and religious conflicts have displaced large numbers of people and created many refugees.

The international community has come to understand better the relations between production and consumption on the one hand and the environment on the other. Priorities among policies to combat narcotic drugs abuse have been further sharpened. The social consequences of advances in new technology on society are being widely debated.

These changes have taken place in an atmosphere more conducive to international cooperation than at any time in the life of the United Nations. The Department expects that this report will contribute to that constructive process.

The Department of Economic and Social Development wishes to place on record the valuable contributions made by several parts of the United Nations Secretariat (especially that of the Centre for Social Development and Humanitarian Affairs), and by the specialized agencies. The Department wishes to thank Mr. Goran Ohlin, former Assistant Secretary-General, who left the Department in 1992 and contributed very significantly to the preparation of this report.

Ji Chaozhu
Under-Secretary-General
for Economic and Social Development

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## EXPLANATORY NOTES

Reference to "tons" indicates metric tons and to "dollars" ($) United States dollars, unless otherwise stated.

A full stop is used to indicate decimals.

A comma is used to distinguish thousands and millions.

The term "billion" signifies a thousand million.

The following symbols have been used in tables:

> Two dots (..) indicate that data are not available or are not separately reported.
>
> A dash (-) indicates that the amount is nil or negligible.
>
> A blank indicates that the item is not applicable.
>
> A minus sign before a figure (-2) denotes a deficit or decrease, except as otherwise indicated.

Details and percentages in tables do not necessarily add to totals, because of rounding.

The following abbreviations have been used:

| | |
|---|---|
| AG | Action Group (Nigeria) |
| AI | artificial intelligence |
| AIDS | acquired immunodeficiency syndrome |
| ALF | Afar Liberation Front (Ethiopia) |
| AM | artificial management |
| ANC | African National Congress |
| ASEAN | Association of South-East Asian Nations |
| BST | bovinesomatotropin |
| BTU | British thermal unit |
| CAD | computer-aided design |
| CAM | computer-aided manufacture |
| CEPGL | Economic Community of the Great Lakes Countries |
| CIDA | Canadian International Development Agency |
| CMEA | Council for Mutual Economic Assistance |
| CNC | computer numerically controlled |
| DNA | deoxyribonucleic acid |
| DRAM | dynamic random access memory |
| ECE | Economic Commission for Europe |
| ECLAC | Economic Commission for Latin America and the Caribbean |
| ECOMOG | ECOWAS Monitoring Group (Liberia) |
| ECOWAS | Economic Community of West African States |

| | |
|---|---|
| EEC | European Economic Community |
| ELN | Ejército de Liberación Nacional (Colombia) |
| ENIAC | electronic numerical integrator and calculator |
| EPL | Ejército Popular de Liberación (Colombia) |
| EPLF | Ethiopian People's Liberation Front |
| EPRP | Ethiopian People's Revolutionary Party |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| FLEC | Liberation Front for Cabinda |
| FMLN | Farabundo Marti Front for National Liberation (El Salvador) |
| FNLA | National Front for the Liberation of Angola |
| FUNCINPEC/ANS | Front uni pour un Cambodge indépendant, neutre, pacifique, et coopératif/Armée nationale Sihanoukiste |
| GATT | General Agreement on Tariffs and Trade |
| GDP | gross domestic product |
| GNI | gross national income |
| GNP | gross national product |
| HIV | human immunodeficiency virus |
| HMOs | health maintenance organizations |
| HSA | human serum albumin |
| ICDC | International Child Development Centre, UNICEF |
| IIEP | International Institute for Educational Planning, UNESCO |
| ILO | International Labour Organisation |
| IMF | International Monetary Fund |
| INPLF | Independent National Patriotic Forces (Liberia) |
| IRA | Irish Republican Army |
| ISDN | Integrated Services Digital Network |
| JASPA | Jobs and Skills Programme for Africa |
| JSS | Jana Sanghati Samiti (Bangladesh) |
| JVP | People's Liberation Front (Sri Lanka) |
| K | kilobyte |
| KPLNF | Khmer People's National Liberation Front (Cambodia) |
| KT | kilo ton |
| M | megabyte |
| MADIA | Managing Agricultural Development in Africa |
| MEDS | macroeconomic data systems |
| MRTA | Movimiento Revolucionario Tupac Amaru (Peru) |
| NBER | National Bureau of Economic Research |
| NCNC | National Convention of Nigerian Citizens |
| NLA | Iranian National Liberation Army |
| NMP | net material product |
| NPC | Northern People's Congress (Nigeria) |
| NPLF | National Patriotic Forces (Liberia) |
| ODA | official development assistance |
| ODP | Orderly Departure Programme |
| OECD | Organisation for Economic Cooperation and Development |
| OLF | Oromo Liberation Front (Ethiopia) |
| ORT | oral rehydration therapy |
| PC | personal computer |
| PLO | Palestine Liberation Organization |
| PPOs | preferred provider organizations |

| | |
|---|---|
| PPP | purchasing power parity |
| RSS | Rashtriya Swayamsevak Sangh (India) |
| SB | Shanti Bahini (Bangladesh) |
| SIPRI | Stockholm International Peace Research Institute |
| SNM | Somali National Movement |
| SPM | Somali Patriotic Movement |
| TFR | total fertility rate |
| TPC | tissue plasminogen activator |
| TPLF | Tigray People's Liberation Front (Ethiopia) |
| TRIPS | trade-related aspects of intellectual property rights |
| UCI | universal child immunization |
| UDCM | United Democratic Christian Movement (Uganda) |
| UNC | Uganda National Congress |
| UN/DESD | Department of Economic and Social Development of the United Nations Secretariat |
| UNCHS (Habitat) | United Nations Centre for Human Settlements (Habitat) |
| UNCTAD | United Nations Conference on Trade and Development |
| UNDP | United Nations Development Programme |
| UNEP | United Nations Environment Programme |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| UNFPA | United Nations Population Fund |
| UNHCR | Office of the United Nations High Commissioner for Refugees |
| UNICEF | United Nations Children's Fund |
| UNITA | National Union for the Total Independence of Angola |
| UNOSOM | United Nations Operation in Somalia |
| UNPROFOR | United Nations Protection Force |
| UNRISD | United Nations Research Institute for Social Development |
| UPA | Uganda People's Army |
| UPD | Uganda People's Democratic Movement |
| USC | United Somali Congress |
| WFP | World Food Programme |
| WHO | World Health Organization |
| WIDER | World Institute for Development Economics Research |
| WIPO | World Intellectual Property Organization |

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country or territory or of its authorities, or concerning the delimitation of its frontiers.

The term "country" as used in the text of this report also refers, as appropriate, to territories or areas.

For analytical purposes, the following country classification has been used:

| | |
|---|---|
| Economies transition: | Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania and the former USSR, comprising the Baltic republics, the Commonwealth of Independent States (CIS) and Georgia |
| Developed market economies: | North America, southern and western Europe (excluding Cyprus, Malta and Yugoslavia), Australia, Japan, New Zealand and South Africa |
| Developing countries: | Latin America and the Caribbean area, Africa (other than South Africa), Asia (excluding Japan) and Cyprus, Malta and Yugoslavia |

The designations of country groups in the text and the tables are intended solely for statistical or analytical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.

Through accession of the German Democratic Republic to the Federal Republic of Germany with effect from 3 October 1990, the two German States have united to form one sovereign State. As from the date of unification, the Federal Republic of Germany acts in the United Nations under the designation "Germany".

On 22 May 1990, the Yemen Arab Republic and the People's Democratic Republic of Yemen merged to form a single sovereign State called the "Republic of Yemen".

Data provided for Yugoslavia prior to 1 January 1992 refer to the Socialist Federal Republic of Yugoslavia, which was composed of six republics.

## INTRODUCTION

### A. Prominence of social development issues

Questions of social development are receiving more prominent consideration from Governments and the international community in 1993 than at any time since the United Nations began its series of reports on the world social situation in 1952.

The issues that confront each group of countries and their significance to policy makers vary significantly. Poverty, unemployment and low productivity employment are of the highest concern to many developing countries. In the economies in transition, poverty and unemployment have emerged as significant problems as these countries change from one set of institutional arrangements to another. High levels of unemployment have persisted over a decade or more in most developed countries. Chronic hunger and malnutrition are concomitants of poverty. These deprivations have been made more severe by such natural disasters as drought and flood and by civil wars and other conflicts. In the absence of adequate infrastructure, natural disasters have taken a heavier toll in the least developed countries, especially in Africa. The limited resources available to Governments have reduced their ability to respond adequately to the needs of those affected.

Rapid population growth, without a parallel increase in opportunities for employment, has created pressure for population movements, which threaten to become a serious source of international conflict. Civil wars, ethnic conflicts and natural disasters have also forced people to move, creating large refugee and displaced populations. The growth of large cities and urban poverty in developing countries without adequate physical infrastructure have created severe problems of sanitation and pollution.

Human resource development has received much attention in all groups of countries, but for different reasons. Nutrition, sanitation, primary health care and primary education remain significant for all developing countries, especially the least developed. In developed countries, the advent of new technology and the persistence of high unemployment rates has increased the significance of education and training. The economies in transition need to change their systems of education radically to meet the challenges of new institutions. Attention has also been focused on the wider concern of human development, including the enjoyment of certain civil rights. In developed countries, the rising costs of medical care and the need to devise an equitable means of paying for such services has received much attention.

Demographic changes and growing restraints on public sector resources, on the one hand, and persisting weaknesses in the delivery of social services, on the other, pose new challenges to social security policies in developed countries. In economies in transition, new institutions and organizations have yet to emerge to replace those dismantled in the process of transition. In developing countries, the major problems remain those of wider coverage and availability and greater equity in sharing the costs of social security.

Major changes in economic and social institutions are in process in the formerly centrally planned economies. These range from changes in the ownership of the means of production, the form of government, and factor and product markets to changes in social security arrangements. In developing countries, there has been a change-over from military or one-party governments to elected governments. Almost universally, attempts have been made to limit the reach of government in the economy. In developed countries, markets have been made freer of government regulation.

As international conflicts have abated and societies have become more liberal, ethnic and religious conflicts and civil wars among groups seeking to capture political power have erupted, most recently in Africa and Europe. New nation States were formed and ethnic groups within nation States are striving for self-determination. The conflicts in Central America have largely been resolved.

The abuse of narcotic drugs, alcohol and tobacco remains a major threat to public health, public order and, in a few instances, to legitimate political institutions.

This report highlights the nature of these social development issues and discusses the variety of policy responses to them.

## B. The economic context

One reason for the deep concern with social development issues is the slow-down in the pace of economic growth. The slow-down in the world economy which began in the 1970s continued throughout the 1980s and worsened in 1991 and 1992 (see table). Total world output dipped in 1991 and grew by less than 1 per cent in 1992. Since some three quarters of total world output originated in developed market economy countries, the total was heavily governed by changes in output in those economies where economic growth was anaemic during 1991 and 1992. Output in the economies in transition fell drastically in 1990, 1991 and 1992. In developing countries, economic growth was higher than in the rest of the world. Economies in Asia generally grew rapidly during the 1980s; those in Africa and Latin America grew much more slowly, and also more slowly than the developed economies. Total output in West Asia fell during the last decade. Except for sub-Saharan Africa, there was some recovery in most developing economies during 1991 and 1992, and growth in Asia continues to be robust. Growth has been especially impressive in China and East and South-East Asia, which have seen their GDP per capita double in the last six or seven years.

Growth of output

(Annual percentage change in GDP)

| | 1981-1990 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|
| World | 2.8 | 3.3 | 1.7 | -0.5 | 0.7 |
| Developed market economies | 2.8 | 3.4 | 2.5 | 0.8 | 1.6 |
| Economies in transition | 2.2 | 2.3 | -5.0 | -16.0 | -14.7 |
| Developing economies | 3.2 | 3.5 | 3.4 | 3.4 | 4.5 |
| Latin America | 1.3 | 1.1 | 0.1 | 2.8 | 2.0 |
| Africa | 2.1 | 3.0 | 2.9 | 2.1 | 2.3 |
| West Asia | -0.8 | 3.2 | 1.9 | -0.1 | 5.1 |
| South and East Asia, excluding China | 5.9 | 6.1 | 6.3 | 5.6 | 5.4 |
| China | 8.7 | 3.6 | 5.2 | 7.0 | 10.0 |
| India | 5.3 | 5.2 | 5.0 | 3.3 | 3.0 |

Source: Department of Economic and Social Development of the United Nations Secretariat.

Since the rate of population growth was well above rates of growth in GDP in Africa, Latin America and West Asia, per capita income fell at 0.9 per cent per annum in Africa, 0.8 per cent per annum in Latin America and 3.7 per cent per annum in West Asia during the decade 1981-1990. In sub-Saharan Africa, GDP per capita fell 0.5 per cent per annum during 1971-1980 and 1.4 per cent during 1981-1990. As a result, economic conditions were worse in 1992 than in 1971 in much of Africa. In Latin America, per capita GDP was lower in 1992 than in 1981.

Negative growth in Africa and Latin America can be attributed to a combination of external and internal factors. Recession in developed countries in the early 1980s caused a slow-down in growth in international trade, declining prices for a large number of commodities exported by developing countries, deteriorating terms of trade and an increase in protection. International interest rates became positive and high in real terms, after having been negative in the mid-1970s. There was a massive net transfer of resources from capital-importing Latin American countries from 1983 to 1989. Net transfer turned positive in 1990 and 1991. Much of this compensated for losses in terms of trade. In 1991 losses from the fall in terms of trade amounted to half the value of net inflows of financial resources. 1/

The economies of some developing countries have been affected by adverse weather and other natural disasters, while in others the opportunities and potential for growth have been destroyed by civil war and political unrest.

Constraints on import capacities have reduced both current production and the potential for future growth. 2/ A shortage of imported inputs has reduced capacity utilization and current output. They have also reduced investment in machinery and equipment for the construction of capital assets. Imports of machinery and transport equipment into Africa fell from 6 per cent in 1980 to 2 per cent of all imports in 1989. The corresponding figures for Latin America were 7 per cent and 3 per cent respectively. 3/ The smaller inflow of knowledge and technology from abroad, whether directly in the form of consultant services or indirectly in the form of machinery and equipment, has had additional negative effects. Finally, net transfers abroad have reduced total resources available for deployment in the domestic economy and, because investment is often postponable, investment has been disproportionately cut back. The drop in investment, in turn, compromises future growth.

Many developing countries have undertaken domestic policy changes, partly in response to the international challenges and partly to correct mistaken policies of the past. In most of these instances, policy packages were devised in negotiations with the International Monetary Fund and the World Bank. The new policies were expected to bring about shifts from production of non-tradeables to tradeables and resources were to be allocated in a way that would ensure a pattern of production that would be viable at international prices. Price distortions existing in the economy were to be eliminated. The latter usually required the abolition of price controls, cuts in most subsidies, the rationalization of the tax and tariff structures and the (gradual) elimination of protectionism. Adjustment policies mostly implied that disequilibrium in the balance of payments was to be removed by a reduction in domestic absorption. Reductions in aggregate domestic demand were to be obtained through a mix of policy instruments, of which wage repression, limits to credit supply and cuts in government expenditure played important roles. Some economies have emerged from these processes robust and vigorous. Others, however, have taken longer than earlier envisaged to achieve these objectives.

The experience of a large number of developing countries in the 1980s ran counter to their principal need for rapid sustained growth with equity in a manner that is environmentally sound. These countries need to grow rapidly since living conditions at present levels of output are unsatisfactory and in many instances are below any reasonable standards. Rapid growth is a necessary condition for their improvement. Growth must be sustained over three or four decades, especially in the least developed and low-income countries, if significant improvements are to be achieved. Growth in the economy needs to be well distributed for more than political reasons. Inequitable growth may flounder after some time because rising inequalities can reach politically unacceptable levels. In addition, however, growth is required in all parts of an economy to generate the internal dynamism needed to sustain growth in the long term. The equitable distribution of the benefits from growth among persons and households implies fairness to women, to backward regions and to distinct ethnic groups within each society. Sustained rapid growth over a considerable stretch of time is essential to reducing environmental degradation due to poor living conditions. At the same time, patterns of development and the technologies adopted need to receive constant attention to avoid damage to the environment from the very process of growth.

## C. Inequality, unemployment and poverty

One consequence of the variegated patterns of growth during the last decade has been changes in the distribution of world output among countries (see chap. VII). Rapid economic growth in China and East Asia, and more recently in India, Indonesia, Malaysia and Thailand, helped to raise the share of world output accruing to the bottom 40 per cent of income recipients in the distribution of world income in 1981. The proportion of world output accruing to the decile of the world population receiving the highest income increased from 53 per cent in 1981 to 58 per cent in 1989. Relatively strong economic growth in the United States of America and Japan accounted for most of that gain. Population deciles 5 to 9 lost output shares. The seventh decile, containing the populations of middle-income developing countries, mainly in Latin America, lost the most. The output share accruing to the bottom decile of income recipients, mostly in sub-Saharan Africa and Bangladesh, was slightly reduced.

Although output grew faster in developing countries than in the developed countries, population growth was three times faster in the former than in the latter. Between 1982 and 1991, the rate of growth of output per capita in developing countries was about half that in developed countries.

The distribution of income among households in many countries has undergone significant change. In the former centrally planned economies, where there was a high degree of evenness in the distribution of income, that distribution has become more skewed. Rapid price inflation, rising unemployment and new opportunities to accumulate wealth have all contributed to this process. In fact, larger inequalities in income and wealth are to be expected within the framework of new institutions and incentive structures, as these countries transform themselves into market economies (see chap. X).

In developing countries, inequality in the distribution of household incomes has declined in some of the rapidly growing economies, including Indonesia, Malaysia and Thailand. In Africa, disparities in income have probably fallen as higher level employment wages and earnings have been reduced. In Latin America, the drop in real wages has reduced incomes accruing to the bottom deciles. Lower inflation has helped to stabilize the incomes of middle-income receivers. High-income receivers have profited from a number of sources, including the purchase and sale of foreign currency.

Low-productivity employment and unemployment have been chronic in developing countries (see chap. VI). Those economies, including Mauritius, the Republic of Korea, Singapore and Taiwan Province of China, where the severity of the problem has been eliminated, are marked by sustained high levels of investment, in both physical and human capital. The rapid growth in the labour force in other developing countries consequent upon improvements in health conditions has not been absorbed in high-productivity employment.

This chronic problem has been aggravated by a loss of employment as economies have become starved of imports and have undergone structural change. To stabilize prices and exchange rates, it has been necessary to restrain government expenditure and credit to the private sector. Freer imports, although at higher domestic prices, have driven out uncompetitive enterprises, throwing both workers and capital equipment out of employment. Although exports have become competitive in foreign markets, there have been delays in establishing enterprises and undertaking investment. The shortage of imports has contributed to unemployment by reducing both current production and investment. Consequently, adjustment policies in the intermediate term have contributed to a growth in unemployment.

In the longer term, the major problem in developing countries is that of low-productivity employment rather than unemployment. High-productivity employment for the growing labour force requires investment in both physical and human capital and an environment conducive to entrepreneurial activity. Internationally, it requires growing international trade and inflows of capital and technology. Raising productive employment is part of the general problem of development rather than a question of employment creation through any particular policy instrument.

In developed market economies, the preoccupation of Governments with the stability of monetary values as an objective has gone hand in hand with persistently high levels of unemployment. The policy choice of trading unemployment for inflation has ceased to exist with the emergence of inflation and unemployment as simultaneous phenomena. Low positive interest rates arising in part from expectations of price stability, greater incentives for work and entrepreneurial activity through reduced marginal rates of taxation, and more competitive labour markets have been the main instruments of choice for increasing levels of economic activity and employment while maintaining price stability. These have been complemented by policies to increase labour mobility and to develop new skills. The limitations of these instruments are visible in the persisting high rates of unemployment in most OECD countries.

One consequence of slow growth and low-productivity employment and unemployment has been that poverty persists as a major economic and social problem. Poverty affects more than 1 billion people living in sub-Saharan Africa, South Asia, China and parts of Latin America and the Caribbean. The speed with which economies have deteriorated in sub-Saharan Africa and parts of Latin America to aggravate conditions of poverty has demonstrated how long-term deficiencies in economic policy and the implementation of unfavourable international conditions can push large masses of people over the edge into poverty. The success of some East Asian developing economies in raising employment and alleviating poverty, noted earlier, demonstrates the feasibility of successfully grappling with these problems in a relatively short span of time.

Poverty has now come into the open in the economies in transition. A drastic drop in production, a steep rise in prices and the new phenomenon of unemployment have created a class of poor people hitherto absent in economies in transition.

In developed countries, high levels of unemployment and the decline in the demand for unskilled labour have permitted the emergence of a class of long-term poor. The persistence of poverty, especially in families with young children, has raised questions in some developed countries regarding the design and adequacy of social security policies (see chap. XI).

Restraints on public sector expenditure have limited the capacity of government in all countries to provide short-term redress for people in poverty. The major emphasis has been on providing opportunities for people to earn their way out of poverty. That approach requires both opportunities to acquire skills and a rapid expansion of employment opportunities. Special efforts need to be made to ensure disadvantaged groups access to productive employment. Credit and extension services to women in developing countries are an example of such policies. In developed countries, policies have been adopted to encourage and enable mothers with dependent children to find adequately paid employment.

## D. Economic growth and social development

The previous section relates economic growth to two major social problems: unemployment and poverty. Rapid economic growth is necessary to expand employment opportunities and to alleviate poverty in the long term. But rapid growth by itself may not be sufficient to do either. Annual GDP growth rates of 9 per cent in Brazil and 7 per cent in Egypt and Thailand from 1965 to 1980 were not sufficient to reduce low-productivity employment and unemployment to satisfactory levels or significantly alleviate poverty in those countries. Patterns of growth are decisive.

Across countries, low per capita income is associated with higher infant mortality and illiteracy, especially among women. Countries in which the infant mortality rate exceeded 100 per thousand and female adult illiteracy rates exceeded 40 per cent in 1989 were at the low end of the scale of per capita GNP. These included Ethiopia, Madagascar, Malawi, Nepal and the United Republic of Tanzania (see chap. III). At the other end of the scale were those countries whose annual per capita GNP exceeded $10,000, whose infant mortality rate was characteristically lower than 10 per thousand and which had virtually no illiteracy.

However, there were significant exceptions. In Viet Nam, for instance, the annual per capita GNP was about $160 and the infant mortality rate was only 43 per thousand in 1989. Similarly, in China and Sri Lanka, whose annual per capita GNP was about $450, the infant mortality rates were 30 and 20 per thousand respectively, in 1989. At the other end of the income scale, in Kuwait, New Zealand, the United Arab Emirates and the United States of America, where per capita GNP exceeded $10,000, the infant mortality rate exceeded 10 per thousand live births. In between were a host of mismatched relationships: the Congo (per capita GNP of $1,017 and an infant mortality rate of 115 per thousand), Bolivia (per capita GNP of $623 and an infant mortality rate of 106 per thousand), Nigeria (per capita GNP of $436 and an infant mortality rate of 100 per thousand) and Pakistan (per capita GNP of $402 and an infant mortality rate of 106 per thousand). 4/ A large group of countries had infant mortality rates below 50 per thousand and adult female illiteracy below 50 per cent. Their per capita GNP ranged from $440 in China to $11,000 in Singapore.

From 1965 to 1989, there were no countries, regardless of what happened to their per capita income, where infant mortality rates rose. In 22 developing countries for which there are data, per capita GNP fell between 1965 and 1989 at the same time as infant mortality rates fell. Among them, were Jamaica, where the infant mortality rate fell by a factor of three, and Kuwait where it fell by a factor of four over this period. There were another 14 countries in which per capita GNP grew by less than 1 per cent per annum during 1965-1989 and infant mortality rates fell over the entire period. In Trinidad and Tobago, for example, per capita GNP grew by 0.4 per cent per annum and the infant mortality rate fell by a factor of three. In another 38 countries, whose economies grew at rates ranging from 1.0 per cent to 7.0 per cent per annum from 1965 to 1989, the infant mortality rate fell consistently over the 25-year period. There were remarkable achievements in Costa Rica and Oman, where infant mortality rates fell by a factor of five, as well as in Botswana, China, Mauritius, Singapore, Sri Lanka and Thailand, where infant mortality rates fell by a factor of three over the same period.

Part of the success in reducing infant mortality has been due to a growth in knowledge and technology. The value of nutrition, sanitation and primary health care in reducing infant mortality has come to be better appreciated. Developments in technology permitting oral rehydration therapy at little cost and successful vaccination against childhood diseases in areas without refrigeration facilities have helped to reduce infectious diseases.

The increase in resources brought about by economic growth permits improvements in social conditions. Whether such improvements actually take place depends on patterns of growth and the economic and social policies of Governments. Even in developed economies, improvements in living standards have often been the direct result of social intervention rather than of simple economic growth. 5/ The extent to which Governments can intervene depends on their ability to collect in tax revenue sufficient resources for the Government to provide services to improve social conditions. The ability of Governments to mobilize resources in this fashion is ultimately determined by the tax-paying public. Whether Governments do actually provide the necessary services depends on patterns of public expenditure. Expenditure to provide food entitlements, primary health care and primary education will improve social conditions, in contrast to public expenditure on the military or programmes and projects benefiting a privileged few (see chap. VIII). Policies and their efficient implementation do matter.

Nevertheless, there are limits - however flexible - to which Governments can direct resources for social development regardless of rates and levels of economic growth. In several developing countries where government revenue has failed to increase because economies are growing slowly or are in recession, large subsidies for food, health and education have been reduced or eliminated. The most rapid growth in social services in developed market economies was during the period of expansion after the Second World War. The dissatisfaction of the public in the former centrally planned economies with their widespread social services reflected in some measure the inability of anaemic economies to bear that burden.

## E. Human resource development

Among recent insights into factors determining long-term growth, the most significant in the present context is the role of education and the "knowledge industry" in generating, adapting and adopting technology. 6/ Seen in that light, recent emphases on human resource development are clearly appropriate.

However, human resource development can mean several things, each of them leading to different policy initiatives. There is for one a focus on human development, which is a broad approach to development. For another, the centre of attention is education and training, which are essential whether for the adoption of current technology or the development of new technology. In a period of rapid technological change the capacity of an economy to gain from these changes will depend on the development of its human resources. Finally, there is entrepreneurship. Whatever else may take place in an economy, it is the entrepreneurs who put together production processes. The importance of each of these concepts to economies will vary depending on initial conditions, as will the policy responses.

Human resource development is the product of policies in a wide range of areas. Nutrition, housing, health and education all play mutually supporting roles in raising the quality of labour. Education, especially of women, is an essential condition for improving nutrition and sanitation. It is less clear what kinds of policy can contribute to the development of entrepreneurial talent. Institutional arrangements which reward entrepreneurship permit and encourage the exercise of such talent. Worsening unemployment and poverty conditions have increased the severity of hunger and malnutrition in some instances (see chap. II). Flood, drought and other natural disasters have brought about conditions of acute hunger and famine in several countries in both Asia and Africa. Civil war and other strife have contributed to these dire conditions in a number of countries in Africa. Some 550 million people, mostly in developing countries, suffer chronic hunger. In economies in transition, the sudden collapse of income-earning opportunities and rapid price increases are the main reasons for the reduction in the supply of food to certain sections of the population. In developed countries, the main nutrition problems relate to the consumption of unhealthful food in excessive quantities.

Health conditions have improved the world over, as shown by the rise in the average expectation of life from 60 years in 1975-1980 to 64 years in 1985-1990 (see chap. III). In 1990, for the first time, 80 per cent of all young children were immunized against diphtheria, pertussis, tetanus, measles, poliomyelitis and tuberculosis. Yet public health policy was confronted with new and continuing challenges. Nearly half the world's population remain exposed to malaria. Nearly a third are infected with tuberculosis and some 20 million people suffer from the disease. New strains of drug-resistant bacteria have appeared and, among those infected in large cities in developed countries, some 1.5 million were estimated to be suffering from AIDS in 1992; 12 to 13 million people were estimated to be infected with HIV and, according to some calculations, that number was projected to grow to 40 million by the year 2000.

AIDS, which seemed concentrated among homosexual men and intravenous drug users mostly in developed countries, has spread to other groups and other countries. In 1992, about 40 per cent of those infected were in Africa, of these, about 50 per cent were women. In 1988 the proportion of the population infected by heterosexual contact in the Caribbean region was estimated at 65 per cent. Children infected with the virus and orphaned by the death of their parents have become a major concern.

The main parameters of a sound health policy are being seen in broader terms. The significance of adequate nutrition, safe drinking water, the sanitary disposal of sewage and the education of women are increasingly being recognized for their value in improving health conditions (see chap. V). In most developing countries, it has become evident that much can be gained by directing more resources from curative services to preventative health care.

In health care, equitable access to services remains a major problem in almost all countries. In developing countries, resource constraints have been a principal limiting factor in extending health care services to all population groups. In economies in transition serious shortcomings in the delivery of services and the change-over to new institutions have created major problems of health care. Rising costs of health care pose major challenges to policy makers in developed countries, especially in the United States of America. The means of financing health care has come under scrutiny, mainly from the point of view of equity.

Primary school enrolment increased in all countries during the 1980s, although at a much slower rate than during the previous decade (see chap. IV). Yet in 1990 the proportion of school children enrolled in primary schools did not exceed 60 per cent in Africa, compared with 92 per cent in developed countries. The access of women to education at all levels remains a major concern in all countries, although in developed countries this is more pronounced in respect of science and technology education at the tertiary level than at other levels. Nearly 1 billion people, two thirds of them women, are illiterate.

Widespread initiatives have been taken to improve the content and quality of education. A tendency to emphasize instruction in the natural sciences and related professions is a response to the increasing importance of science and technology in production processes. In developing countries, the most pronounced shift has occurred from the humanities to the social sciences and management studies. In the economies in transition the content of education has been revised subsequent to the massive political and social changes of recent years. New curricula have been developed everywhere for both primary and secondary education in order to link education more closely to conditions of work and life in society. However, one of the major difficulties in bringing about improvements in developing countries, especially in Africa, is the scarcity of skilled teachers, textbooks and other teaching material.

Books, newspapers, radio and television have become more generally available. In several developing countries radio and television are used for educational purposes in the absence of more conventional educational facilities.

## F. New challenges in the provision of social services

The provision of social services has encountered several challenges during the past two years (see chap. XI). The demand for social services in developed countries increased on account of continued high levels of unemployment, population ageing and the growth of one-parent families with a low income or no income. In the economies in transition, the change-over to a new system disrupted the old arrangements, by which the Government and government-owned enterprises provided cradle-to-grave social services. In developing countries, deteriorating conditions of economic well-being in some countries, rapidly growing populations in most, and conditions of often widespread poverty placed heavy burdens on those services.

In many developing countries, payment of interest on debt, both domestic and foreign, and expenditure for military purposes has reduced the public sector resources available for social services (see chap. VIII). In Côte d'Ivoire, for instance, the index of total government expenditure in real terms after the payment of interest on the public debt in 1987-1989 was no more than a third of what it was in 1980-1983. In the more heavily indebted countries, interest payments on the foreign debt abroad siphoned off 2 per cent to 5 per cent of GDP. In several developing countries government expenditure for military purposes exceeded that for social services. With lower interest rates, reduced government debt and the general abatement of military conflicts, improvements were recorded in most of those countries in 1990 and 1991.

In this general atmosphere of scarcity, some attention has been paid to limiting expenditure and raising the effectiveness of such expenditure by targeting social service expenditure to the more needy. Several problems have surfaced in the process. First, identifying the "more needy" can be costly in societies where there is little economic and social information and where the skilled personnel to generate such information are few. Further, where information on the population is available, government authorities often make use of the knowledge to subject the public to controls which have little or nothing to do with the provision of social services. When public officials are given discretion in identifying persons eligible for benefits and determining the extent of those benefits, the exercise of such discretion can become a source of illegal emoluments to the officers concerned. Finally, the extension of benefits to influential and vocal groups who do not need government assistance may be a political price a government must pay to obtain sufficient popular support to assist the poorest and most vulnerable members of society.

In all groups of countries, there is dissatisfaction with social services provided by the public sector. One major reason for the poor quality of services is the lack of incentives to improve their quality. Attempts have been made in several countries to introduce elements of competition with a view to raising the quality of services and reducing their cost. Decentralizing control over institutions and providing clients with opportunities to seek alternative sources of services have helped subject providers of services to greater competition. An approach which has been increasingly discussed is to provide parents with vouchers to pay for their children's education. Subjecting the provision of services to competitive bidding by the private sector has become more commonplace.

### G. Social consequences of advances in technology

The pace of technological change has accelerated sharply during the past two decades. These changes have occurred in three main areas: information technology, biotechnology and material sciences. They have affected virtually all aspects of everyday life and are therefore parallel to the series of changes which brought about the Industrial Revolution some 200 years ago. Like that earlier wave of changes, these advances will spread among countries differentially, mainly because the new technology is closely associated with advances in science and engineering. Since change is rapid, advances in technology can be adopted only where investment is high. For the same reason, it is also necessary to train workers continually. Therefore the spread of the technology will be mainly limited to developed countries and a few developing countries that have the requisite scientific and engineering capacity and investment potential. However, the use of equipment embodying the technology is already quite widespread (see chap. XIV).

The new technology has enabled information, including news broadcasts, to be disseminated rapidly. It has also helped to connect financial markets and increase the number and volume of transactions. With the new technology, work is beginning to be decentralized, in contrast to the factory system which came with the Industrial Revolution and which brought a large number of people to work in one place. Such work as accounting and record keeping is being performed by economies that are distant from each other but are connected by communication systems. Computer-assisted designing has permitted both reductions in inventories and quick responses to the consumer's choice of designs and materials. Managerial and clerical work in offices has been deeply affected by the innovations. Knowledge has been further advanced by the new capacity for processing massive volumes of data rapidly and at low cost. The rapid dissemination of news, especially via television, has created opportunities for bringing the world closer together, as demonstrated most recently by the response to the disasters in Somalia.

The advent of numerically controlled machine tools has de-skilled some of the best paid workers in manufacturing. The new technology has mechanized several functions usually performed by women, but has created other tasks for them. The nature of work in some professions has begun to change as expert systems take over many routine functions currently performed by skilled professionals.

Biotechnology has deep implications for agriculture, the pharmaceutical industry, the practice of medicine and many other areas. These arise from a new capacity to alter and otherwise affect genes. The new technology can raise yields, reduce dependency on chemical fertilizers, pesticides and herbicides and modify plant and animal characteristics to suit given conditions. There is a danger that these techniques may make it feasible for a society to write in its own preferences with regard to the evolution of humans, challenging deeply held humanistic views about equality among humans. New pharmaceutical products produced with the new technology have been on the market for several years with the promise of many more to come. These innovations are protected under patent laws that grant property rights in them to profit-seeking enterprises, in contrast to the earlier generation of advances in plant breeding, which contributed to the Green Revolution. Intervention in human reproduction has posed challenges to long-held concepts of parentage and related laws.

### H. Ethnic conflicts and national disintegration

Civil wars and internal conflicts have become the principal causes of violence, destruction and the displacement of people as conflicts between nation States and rivalry among major military powers subside (see chap. XII). During the period 1989-1990, there were 33 armed conflicts in the world, only one of which was between nation States. Some 2 million people have fled the former Yugoslavia as refugees or displaced persons. Over a longer period of time, civil war and other internal conflicts have destroyed opportunities for economic and social betterment in several countries, including Afghanistan, Angola, Ethiopia, Liberia, Somalia and the Sudan.

Most nation States today are multi-ethnic and multi-denominational in religion. Nigeria contains some 250 identifiable ethnic groups, Uganda 28 and the Sudan 19. Indians speak 14 major languages. The former Yugoslavia contained, among other groups, Orthodox Serbs, Catholic Croats and Bosnian Moslems, all of whom speak the same language. People are divided by religion in, for example, India, Israel, Lebanon, Myanmar, Nigeria, Northern Ireland, the Philippines and the Sudan. There has also been an increase in religious fundamentalism, which has been a source of tension and conflict in many societies. In Somalia, where the population is united by language and religion, clan-based divisions have demarcated the parties to the conflict.

The causes of these conflicts are not clear; in many nation States ethnic groups live in peace with each other. However, plentiful supplies of armaments at low prices have made conflicts more lethal than before in countries prone to ethnic violence. A lack of physical and social infrastructure that can bring people together and enlarge markets and opportunities for economic betterment may have contributed to divisiveness between communities. The collapse of a unifying authority, as in the former Union of Soviet Socialist Republics and the former Yugoslavia, is another factor behind ethnic conflict. A tendency to affirm one's identity by rejecting outside cultural influences is yet another. A failure to provide opportunities for minority groups to participate actively in the exercise of political power has also contributed to social divisions. Finally, it is noteworthy that some nation States are composed of several ethnic and religious groups who have historically been antagonistic to one another.

Although the conflicts have begun as internal disputes, they have often become international crises. People of the same ethnic origin and religious affiliation frequently live in different nation States, which may be adjacent to each other. Those living abroad provide both moral and material support. Victims flee to other countries. Refugees and displaced persons have become a major concern to Governments of host countries and international organizations. The United Nations, regional intergovernmental organizations and non-governmental organizations are all involved in providing humanitarian assistance and seeking to resolve such conflicts.

The assimilation of diverse groups in a culture shared by all, as in much of Latin America and North America, is the best long-term solution to these problems. Increased mobility in an expanding economy can be enormously helpful in such processes. Improved means of transport and communication are an essential component of improved relations. Greater autonomy in political structures and ample opportunities for consultation and participation can significantly contribute to defusing violence as a means of obtaining access to power.

### I. Narcotic drug, tobacco and alcohol abuse

Narcotic drugs, tobacco and alcohol satisfy a persistent consumer demand. The production and distribution of these commodities provide employment and incomes to large numbers of people. For some countries, they are significant earners of foreign exchange. Taxes on the consumption of alcohol and tobacco are a not inconsiderable source of revenue to many Governments (see chap. XV).

Abuse of these commodities, however, gives rise to major social problems and is associated with several serious illnesses. Abuse of drugs and alcohol impairs social competence and performance and is a leading cause of accidents both at home and on the road. The production, trafficking and consumption of narcotics drugs are major forces behind the rapid growth in crime. In some instances such activities have subverted legitimate political processes. The enforcement of laws against drug trafficking and abuse and the treatment and rehabilitation of addicts consume large amounts of resources.

The most effective means of reducing abuse is educating people about their negative effects. As long as demand remains high, producers and distributors will find it profitable to carry on their activities. In addition to public education laws against the consumption and production of narcotic drugs and trafficking in them may provide a deterrent. Although there have been arguments in favour of decriminalising these activities and redirecting resources to rehabilitation and more effective public education, the dangers of widespread abuse and addiction are so serious that Governments are reluctant to do so.

## J. Coverage and statistical information

The availability of information determined which countries were covered in the present report. Government reports, publications of intergovernmental and non-governmental organizations and the output of individual scholars were all useful.

The statistical data available for the report were incomplete and often non-comparable among countries. Data on government expenditure, for instance, refer only to that of the central government. Often the data are not up to date. With respect to indicators of general mortality such as life expectancy at birth, moreover, fewer than 40 developing countries - mostly in Latin America - have vital registration systems recording 90 per cent or more of deaths. 7/ For several countries in Asia and all countries in continental sub-Saharan Africa, mortality estimates are based on indirect techniques, using model life tables, that take advantage of data collected in surveys and censuses. In 18 countries, averages of neighbouring countries were used to generate mortality rates. Measurements of literacy and education are based on infrequent surveys and censuses, with short-term changes interpolated. Changes reported in mortality and education are as much derived from short-cut estimates, assumed model changes and the introduction of data based on new censuses and surveys as they are from any actual changes in the social situation.

However, in order to assess general trends in social development and the efficacy of different development policies, utilizing the best available estimates is better than making no estimates at all. In the present report, no attempt has been made to refine the data in published sources. Yet, one cannot overemphasize the need for reliable and timely data on social development. Moreover, the widespread use of data based on estimates and other indirect approaches should be a matter of concern to the extent that the impression may mistakenly be given that the data needed are already being gathered in all developing and developed countries. Such estimates, in a sense, devalue a host of efforts to obtain real and timely information on social variables in developing countries. Empirical data remain now as before essential for the identification of problems in social development, the formulation of social policies and the evaluation of their efficacy.

## K. Organization of the present report

The assessment of social conditions is found mainly in part one. Part two discusses problems of social development which have emerged as concerns of major significance since the publication of the *1989 Report on the World Social Situation*. 8/ The introduction responds to the requests contained in General Assembly resolutions 44/56 and 46/95 and Economic and Social Council resolutions 1989/72 and 1991/4. The conclusion reviews the findings of the report in relation to the objectives of the World Summit for Social Development set forth in General Assembly resolution 47/92.

## Notes

1/ See "Net transfer of resources between developing and developed countries: report of the Secretary-General" (A/47/404).

2/ Lance Taylor, *Foreign Resource Flows and Developing Country Growth*, (Helsinki, World Institute for Development Economics Research, 1991), p. 9.

3/ *World Economic Survey, 1992* (United Nations publication, Sales No. E.92.II.C.1 and corrigenda), table A.19.

4/ These relationships have been summarized in the form of regression coefficients in World Bank, *World Development Report, 1991* (Washington, D.C., 1991), p. 161.

5/ See Jean Drèze and Amartya Sen, "Public action for social security: foundations and strategy", in *Social Security in Developing Countries*, Ehtisham Ahmed, Jean Drèze, John Hills and Amartya Sen, eds. (New York, Oxford University Press, 1991), p. 11.

6/ Ephanan Helpman, "Endogenous macro-economic growth theory", *European Economic Review*, No. 36 (1992), pp. 238-267.

7/ See C. Murray, "A critical review of international mortality data", *Social Science and Medicine Review*, vol. 27, No. 7 (1987), pp. 773-781.

8/ United Nations publication, Sales No. E.89.IV.1.

# Part one

# SOCIAL CONDITIONS

# Chapter I

# POPULATION GROWTH, URBANIZATION, MIGRATION AND REFUGEES

The rapid population growth in developing countries has been a cause of alarm for many decades. It has recently attracted renewed attention in two specific contexts. The discussions about sustainable development before and during the United Nations Conference on Environment and Development, which was held at Rio de Janeiro in June 1992, brought into sharp focus the ecological limits to growth and the dangers posed by large and growing populations driven by poverty to despoil the environment irrevocably. Migration, both within countries and across borders, is mounting. Political and economic disruption are important immediate causes of specific flows of migration, but demographic pressure and growing economic disparities create strong underlying forces for population movements which threaten to become a serious source of international conflict.

This chapter reviews recent developments in these areas.

## A. Population growth

### 1. Size, growth and distribution

The world population in mid-1991 was 5.4 billion. Its annual rate of growth is expected to drop from 1.7 per cent per year at present to 1.6 per cent in 1995-2000, 1.5 per cent in 2000-2005, 1.2 per cent in 2010-2015 and 1.0 per cent in 2020-2025 (see table I.1). The world population is projected to reach 6.3 billion in the year 2000 and 8.5 billion in 2025.

Out of an annual average increment to the world population of 47 million in 1950-1955, 23 per cent originated in the developed countries and 77 per cent in the developing countries (7 per cent in the least developed countries and 70 per cent in other developing countries). Of the annual average addition of 88 million in 1985-1990, the share of developed countries was 7 per cent; 93 per cent of the growth occurred in developing regions (13 per cent in the least developed countries and 80 per cent in other developing countries). An increasing share of the increment to the world population will come from Africa: on present projections, Africa, which is currently contributing 20 per cent to the growth of world population each year, is expected to contribute 35 per cent in 2020-2025. Africa is currently growing at the rate of 3 per cent a year, faster than any other region, and it is so far projected to grow rapidly in the next century even though population growth in other regions will then have slowed down a great deal. However, if economic development takes off in Africa, this could change.

Table I.1. Size, annual rate of increase, increment and distribution of population by major areas of the world, medium variant, 1950-2025

| Year | World | Developed | Developing | Least developed | Africa | Latin America | Northern America | Asia | Europe | Oceania | USSR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | **Population** | | | | | | |
| | | | | | (Millions) | | | | | | |
| 1950 | 2 516 | 832 | 1 684 | 169 | 222 | 166 | 166 | 1 378 | 393 | 13 | 180 |
| 1970 | 3 698 | 1 049 | 2 649 | 263 | 362 | 286 | 226 | 2 102 | 460 | 19 | 243 |
| 1990 | 5 292 | 1 207 | 4 086 | 444 | 642 | 448 | 276 | 3 113 | 499 | 26 | 289 |
| 2000 | 6 260 | 1 264 | 4 997 | 595 | 866 | 538 | 295 | 3 713 | 510 | 30 | 308 |
| 2025 | 8 504 | 1 354 | 7 150 | 1 039 | 1 597 | 757 | 332 | 4 912 | 515 | 38 | 352 |
| | | | | | **Annual rate of increase** | | | | | | |
| | | | | | (Percentage) | | | | | | |
| 1950-1955 | 1.79 | 1.28 | 2.04 | 1.82 | 2.21 | 2.73 | 1.80 | 1.89 | 0.79 | 2.25 | 1.71 |
| 1965-1970 | 2.06 | 0.90 | 2.54 | 2.48 | 2.64 | 2.60 | 1.13 | 2.44 | 0.66 | 1.97 | 1.00 |
| 1985-1990 | 1.74 | 0.54 | 2.11 | 2.80 | 2.99 | 2.06 | 0.82 | 1.87 | 0.25 | 1.48 | 0.78 |
| 1995-2000 | 1.63 | 0.45 | 1.94 | 2.83 | 2.97 | 1.76 | 0.61 | 1.68 | 0.23 | 1.24 | 0.64 |
| 2000-2005 | 1.47 | 0.38 | 1.74 | 2.71 | 2.89 | 1.62 | 0.55 | 1.43 | 0.15 | 1.13 | 0.61 |
| 2020-2025 | 0.99 | 0.18 | 1.15 | 1.73 | 1.90 | 1.12 | 0.34 | 0.89 | -0.05 | 0.76 | 0.47 |
| | | | | | **Average annual increment** | | | | | | |
| | | | | | (Millions) | | | | | | |
| 1950-1955 | 47.1 | 11.0 | 36.1 | 3.2 | 5.2 | 4.9 | 3.1 | 27.3 | 3.2 | 0.3 | 3.2 |
| 1965-1970 | 72.3 | 9.2 | 63.1 | 6.2 | 8.9 | 7.0 | 2.5 | 48.2 | 3.0 | 0.4 | 2.4 |
| 1985-1990 | 88.2 | 6.4 | 81.7 | 11.6 | 17.8 | 8.8 | 2.2 | 55.5 | 1.2 | 0.4 | 2.2 |
| 2000-2005 | 95.7 | 4.9 | 90.8 | 17.3 | 27.0 | 9.1 | 1.6 | 55.0 | 0.7 | 0.3 | 1.9 |
| 2020-2025 | 82.6 | 2.4 | 80.1 | 17.2 | 29.0 | 8.2 | 1.1 | 42.5 | -0.2 | 0.3 | 1.6 |

Table I.1 (continued)

| Year | World | Developed | Developing | Least developed | Africa | Latin America | Northern America | Asia | Europe | Oceania | USSR |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Percentage distribution | | | | | | | |
| 1950 | 100 | 33.1 | 66.9 | 6.7 | 8.8 | 6.6 | 6.6 | 54.7 | 15.6 | 0.5 | 7.2 |
| 1970 | 100 | 28.4 | 71.6 | 7.1 | 9.8 | 7.7 | 6.1 | 56.8 | 12.5 | 0.5 | 6.5 |
| 1990 | 100 | 22.8 | 77.2 | 8.4 | 12.1 | 8.5 | 5.2 | 58.8 | 9.4 | 0.5 | 5.4 |
| 2000 | 100 | 20.2 | 79.8 | 9.5 | 13.8 | 8.6 | 4.7 | 59.3 | 8.1 | 0.5 | 4.9 |
| 2025 | 100 | 15.9 | 84.1 | 12.2 | 18.8 | 8.9 | 3.9 | 57.8 | 6.1 | 0.5 | 4.1 |

Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4).

The acceleration in world population growth from 1.8 per cent per year in 1950-1955 to 2.1 per cent per year in 1965-1970 resulted from a rapid decrease in mortality (the crude death rate declined from 20 to 13 deaths per thousand persons) and a slow decline in birth rate (from 37 to 34 births per thousand). The rapid decline in the rate of population growth in subsequent years can be described as fertility-driven. By 1975-1980, the crude birth rate had fallen to 28 births per thousand population, while the crude death rate was still 11 per thousand population. Between 1975-1980 and 1990-1995, the crude birth rate declined more slowly, from 28 to 26 births per thousand (see table I.2). Since 1975, population growth has been stable and is anticipated to remain so until 1995. A rapid deceleration of population growth is projected to begin after 1995, from 1.7 per cent in 1990-1995 to 1.0 per cent in 2020-2025.

The distribution of the population among the different regions of the world is changing. Africa, as a proportion of a growing world population, increased from 8.8 per cent in 1950 to 12.1 per cent in 1990 and the share of developed countries fell from 16 per cent in Europe in 1950 to 9 per cent in 1990, and may be 6 per cent in 2025 (see figure I.1).

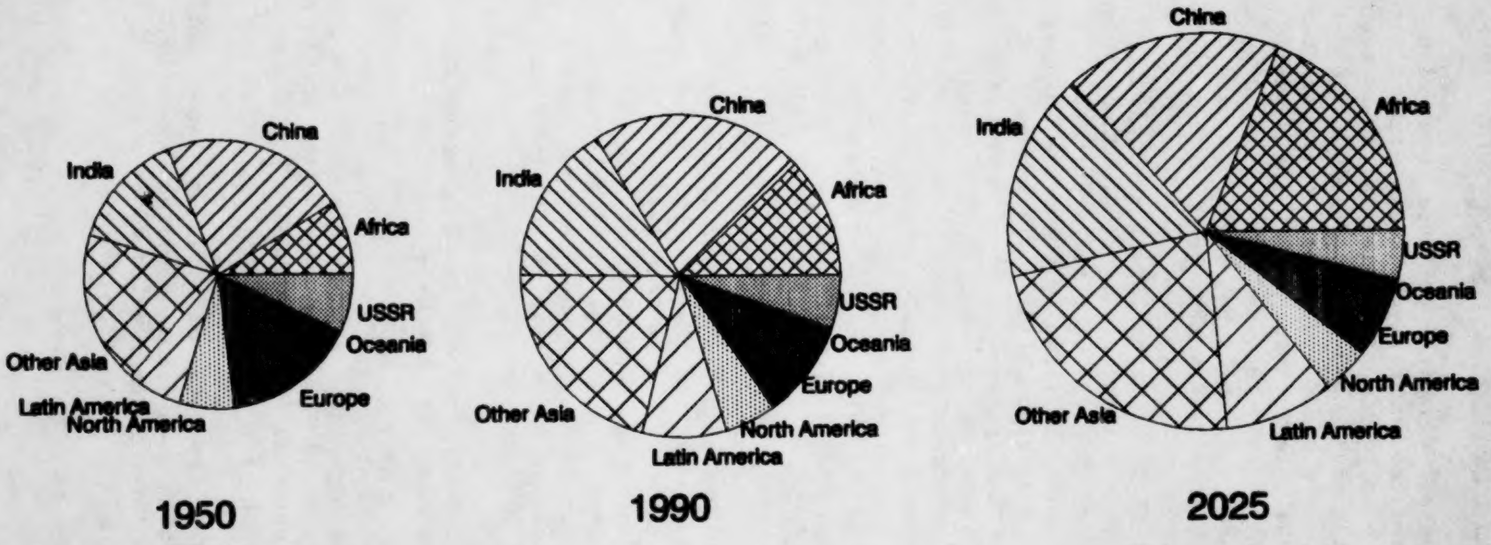
Table I.2. Crude birth rate and crude death rate by major area, 1975-2025

(Per 1,000 population)

| | Crude birth rate | | | | | | Crude death rate | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Major area and region | 1975-1980 | 1980-1985 | 1985-1990 | 1990-1995 | 1995-2000 | 2020-2025 | 1975-1980 | 1980-1985 | 1985-1990 | 1990-1995 | 1995-2000 | 2020-2025 |
| World total | 28.3 | 27.6 | 27.1 | 26.4 | 24.9 | 17.5 | 11.1 | 10.4 | 9.8 | 9.2 | 8.6 | 7.6 |
| Developed countries | 15.6 | 15.2 | 14.5 | 13.9 | 13.4 | 11.9 | 9.4 | 9.6 | 9.8 | 9.6 | 9.5 | 10.6 |
| Developing countries | 32.8 | 31.7 | 31.0 | 30.0 | 27.9 | 18.6 | 11.7 | 10.6 | 9.8 | 9.1 | 8.4 | 7.1 |
| Africa | 46.1 | 45.3 | 44.7 | 43.5 | 41.6 | 26.0 | 17.6 | 16.4 | 14.7 | 13.2 | 11.9 | 7.0 |
| Asia | 29.7 | 28.4 | 27.8 | 26.9 | 24.7 | 16.1 | 10.7 | 9.7 | 9.0 | 8.4 | 7.8 | 7.2 |
| Latin America | 32.4 | 30.6 | 28.7 | 26.8 | 24.8 | 18.4 | 8.6 | 7.9 | 7.4 | 7.0 | 6.6 | 7.0 |
| Northern America | 15.1 | 15.6 | 15.0 | 13.9 | 13.1 | 11.7 | 8.5 | 8.5 | 8.7 | 8.7 | 8.8 | 9.9 |
| Europe | 14.4 | 13.4 | 12.9 | 12.8 | 12.4 | 10.9 | 10.4 | 10.5 | 10.7 | 10.6 | 10.3 | 11.5 |
| Oceania | 20.9 | 20.0 | 19.4 | 18.6 | 17.9 | 14.0 | 8.8 | 8.2 | 8.1 | 8.0 | 7.9 | 8.3 |
| USSR | 18.3 | 19.1 | 18.4 | 16.7 | 15.9 | 14.1 | 10.0 | 10.7 | 10.6 | 9.9 | 9.5 | 9.4 |

Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4), tables 35 and 38.

Figure I.1. Percentage distribution of world population, 1950, 1990 and 2025



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Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4).

## 2. Fertility and family planning

Historically, lower rates of population growth have come about with reductions in fertility preceded by reduced mortality. The total fertility rate (the average number of children born to a woman during her child-bearing age) in the world fell from 3.84 in 1975-1980 to 3.45 in 1985-1990 (see table I.3). Total fertility rates in developing countries remain well above those in developed countries, where the rate is about 2. In Latin America, the total fertility rate fell from 4.4 in 1975-1980 to 3.6 in 1985-1990, and in Asia from 4.1 to 3.5. In Africa, however, the total fertility rate remained in the range of 6.5 to 6.2 children per woman.

Many factors determine the level of fertility: infant and child mortality, education (especially of women), industrialization, urbanization, income level and distribution, status of women, labour force structure, religious and ethnic affiliation, modernization, family structure, old-age security, and the costs and benefits of raising children. Advances in social and economic development and organized family-planning programmes play significant roles in bringing about changes in reproductive behaviour. The availability of contraceptives is of paramount importance. The decline in fertility in developing countries has been attributable largely to the rapid spread of contraception. Age of first marriage and sexual activity outside marriage, the duration of breast-feeding of children (which delays the return of ovulation following a birth) and the practice of induced abortion are other important proximate determinants of fertility. Yet none of them seem more important than the use of contraceptives. 1/

The percentage of married couples using contraceptives in the developing countries has grown from less than 10 per cent in the 1960s to 45 per cent in 1983 and to 48 per cent in 1987 (see table I.4). In East Asia, where fertility rates have more than halved over the past 25 years, the use of contraceptives increased from 13 per cent in the 1960s to 74 per cent in 1987. In China, 72 per cent of all married couples were reported to use contraceptives. The corresponding rates in Latin America and South Asia in 1987 were 59 per cent and 39 per cent respectively.

The status of women in society, especially their level of education and employment, affects their ability to choose contraception and other family-planning methods.

Lack of health services for women often obstructs access to family-planning services. In most developing countries, less than 20 per cent of the health budget is allocated to maternal and child health programmes and a larger part of it goes to child health. 2/

There is a close connection between the level of a mother's education and the size of her family. In 30 developing countries, on average, women with seven or more years of education bore 3.9 children, while women with no

Table I.3. Crude birth rate and total fertility rate, world and major areas, medium variant, 1950-2025

| Period | World | Developed regions | Developing regions | Africa | Latin America | Northern America | Asia | Europe | Oceania | USSR |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | **Total fertility rate** | | | | | |
| | | | | | (Number or births per woman) | | | | | |
| 1950-1955 | 5.00 | 2.84 | 6.19 | 6.65 | 5.87 | 3.47 | 5.92 | 2.59 | 3.83 | 2.82 |
| 1975-1980 | 3.84 | 2.03 | 4.54 | 6.54 | 4.36 | 1.91 | 4.06 | 1.98 | 2.79 | 2.34 |
| 1985-1990 | 3.45 | 1.89 | 3.94 | 6.24 | 3.55 | 1.81 | 3.48 | 1.72 | 2.51 | 2.38 |
| 1995-2000 | 3.14 | 1.90 | 3.47 | 5.70 | 3.00 | 1.86 | 3.02 | 1.74 | 2.34 | 2.25 |
| 2020-2025 | 2.27 | 1.94 | 2.32 | 3.04 | 2.39 | 1.94 | 2.06 | 1.85 | 2.02 | 2.10 |
| | | | | | **Crude birth rate** | | | | | |
| | | | | | (Per thousand) | | | | | |
| 1950-1955 | 37.4 | 22.6 | 44.6 | 49.2 | 42.5 | 24.6 | 42.9 | 19.8 | 27.6 | 26.3 |
| 1975-1980 | 28.3 | 15.6 | 32.8 | 46.1 | 32.4 | 15.1 | 29.7 | 14.4 | 20.9 | 18.3 |
| 1985-1990 | 27.1 | 14.5 | 31.0 | 44.7 | 28.7 | 15.0 | 27.8 | 12.9 | 19.4 | 18.4 |
| 1995-2000 | 24.9 | 13.4 | 27.9 | 41.6 | 24.8 | 13.1 | 24.7 | 12.4 | 17.9 | 15.9 |
| 2020-2025 | 17.5 | 11.9 | 18.6 | 26.0 | 18.4 | 11.7 | 16.1 | 10.9 | 14.0 | 14.1 |

Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4).

Table I.4. Estimates and projections of contraceptive prevalence among married women of reproductive age, 1983-2025

(Percentage)

| | 1960-1965 | 1983 | 1987 | 1990 | 2000 | 2010 | 2025 |
|---|---|---|---|---|---|---|---|
| World | - | 51 | 53 | 55 | 60 | 63 | 72 |
| Developed countries | - | 70 | 71 | 71 | 71 | 70 | 70 |
| Developing countries | 9 | 45 | 48 | 50 | 56 | 64 | 73 |
| Africa | 5 | 14 | 16 | 17 | 27 | 42 | 66 |
| East Asia a/ | 13 | 74 | 74 | 75 | 78 | 79 | 79 |
| South Asia and Oceania b/ | 7 | 34 | 39 | 41 | 52 | 63 | 73 |
| Latin America | 14 | 56 | 59 | 61 | 67 | 71 | 74 |

Source: Levels and Trends of Contraceptive Use as Assessed in 1988 (United Nations publication, Sales No. E.89.XIII.4).

a/ Excluding Japan.

b/ Excluding Australia and New Zealand.

schooling bore 6.9 (see table I.5). Education directly changes attitudes, values and beliefs towards a small family norm and towards a style of child-rearing that is relatively costly to the parents in time and money. In Thailand, the fewer the number of children in a family, the more likely a child was to stay in school. 3/ In Liberia, women who had been to secondary school were 10 times more likely to be using family-planning services than those who had never been to school. In four Latin American countries, education was responsible for between 40 per cent and 60 per cent of the decline in fertility registered over the past decade. With education, women acquire upward social mobility and a capacity to earn incomes, all of which increases the opportunity cost of the time spent on child-rearing.

Education is also associated with reduced child mortality. Educated women are more likely to protect their children's health. For every year of mothers' education, child mortality is reduced 7 per cent to 9 per cent. In Peru, educated women had healthier children regardless of whether there was a clinic or hospital nearby. To the extent that education affects maternal and child health, breast-feeding, contraceptive use, familial relationships, labour force participation and the acquisition of education by women help further to reduce fertility.

### Table I.5. Measures of current and cumulative fertility for ages 15-49, according to respondent's education a/

| | Total fertility rate by years of education | | | | |
|---|---|---|---|---|---|
| | Zero (1) | One to three (2) | Four to six (3) | Seven or more (4) | Difference: (1) - (4) (5) |
| Africa | 7.0 | 7.2 | 6.2 | 5.0 | 2.0 |
| Benin | 7.4 | 8.5 | 5.8 | 4.3 | 3.1 |
| Cameroon | 6.4 | 7.0 | 6.8 | 5.2 | 1.2 |
| Côte d'Ivoire b/ | 7.4 | 8.0 | 6.4 | 5.8 | 1.6 |
| Egypt | .. | .. | .. | .. | .. |
| Ghana | 6.8 | 6.7 | 6.7 | 5.5 | 1.3 |
| Kenya | 8.3 | 9.2 | 8.4 | 7.3 | 1.0 |
| Lesotho | 6.2 | 5.6 | 6.0 | 4.8 | 1.4 |
| Mauritania c/ | .. | .. | .. | .. | .. |
| Morocco | 6.4 | 5.2 | 4.4 | 4.2 | 2.2 |
| Senegal | 7.3 | (9.4) | 6.3 | 4.5 | 2.8 |
| Sudan | 6.5 | 5.6 | 5.0 | 3.4 | 3.1 |
| Tunisia d/ | .. | .. | .. | .. | .. |
| Latin America and the Caribbean | 6.8 | 6.2 | 4.8 | 3.2 | 3.6 |
| Colombia | 7.0 | 6.0 | 3.8 | 2.6 | 4.4 |
| Costa Rica d/ | 5.0 | 5.0 | 3.6 | 2.7 | 2.3 |
| Dominican Republic | 7.0 | 7.3 | 5.4 | 3.0 | 4.0 |
| Ecuador | 7.8 | 7.2 | 5.3 | 2.7 | 5.1 |
| Guyana | 6.6 | 7.0 | 5.6 | 4.8 | 1.8 |
| Haiti | 6.0 | 4.8 | 4.1 | 2.8 | 3.2 |
| Jamaica | (6.2) | (5.9) | 5.8 | 4.8 | 1.4 |
| Mexico | 8.1 | 7.5 | 5.8 | 3.3 | 4.8 |
| Panama e/ | 7.0 | 6.9 | 5.0 | 3.0 | 4.0 |
| Paraguay | 8.2 | 6.6 | 4.6 | 2.9 | 5.3 |
| Peru | 7.3 | 6.8 | 5.1 | 3.3 | 4.0 |
| Trinidad and Tobago | (4.6) | (3.4) | 4.1 | 3.2 | 1.4 |
| Venezuela f/ | 7.0 | 6.4 | 4.6 | 2.6 | 4.4 |
| Asia and Oceania | 7.0 | 6.4 | 5.8 | 3.9 | 3.1 |
| Bangladesh | 6.1 | 6.4 | 6.7 | 5.0 | 1.1 |
| Fiji d/ | .. | .. | .. | .. | .. |
| Indonesia d/ | .. | .. | .. | .. | .. |
| Jordan | 9.3 | 8.6 | 7.0 | 4.9 | 4.4 |
| Malaysia | 5.3 | 5.3 | 4.8 | 3.2 | 2.1 |
| Nepal d/ | .. | .. | .. | .. | .. |
| Pakistan | 6.5 | 5.4 | 6.1 | 3.1 | 3.4 |
| Philippines | 5.4 | 7.0 | 6.2 | 3.8 | 1.6 |
| Republic of Korea | 5.7 | 5.5 | 4.3 | 3.4 | 2.3 |

Table I.5 (continued)

| | Total fertility rate by years of education | | | | |
|---|---|---|---|---|---|
| | Zero (1) | One to three (2) | Four to six (3) | Seven or more (4) | Difference: (1) - (4) (5) |
| Sri Lanka d/ | .. | .. | .. | .. | .. |
| Syrian Arab Republic | 8.8 | 6.7 | 5.6 | 4.1 | 4.7 |
| Thailand d/ | .. | .. | .. | .. | .. |
| Yemen g/ | 8.6 | ------------(5.4)---------- | | | .. |
| Total for countries with TFR available h/ | 6.9 | 6.6 | 5.5 | 3.9 | 3.0 |

*Source*: *Fertility Behaviour in the Context of Development: Evidence from the World Fertility Survey* (United Nations publication, Sales No. E.86.XIII.5).

a/ Years of schooling completed.

b/ Formerly called the Ivory Coast.

c/ Educational categories are: none; less than primary or Koranic school; primary completed; more than primary.

d/ Children ever born based on ever married women aged 40-49, rather than on all women of these ages.

e/ Fertility rate at ages 15-19, used for computing the total fertility rate, is taken from the period 5-9 years before the survey.

f/ Total fertility rate refers to ages 15-44; children ever born based on ages 40-44.

g/ In Yemen, all interviewed women aged 40-49 had zero education.

h/ Averages excluding values for combined or missing categories.

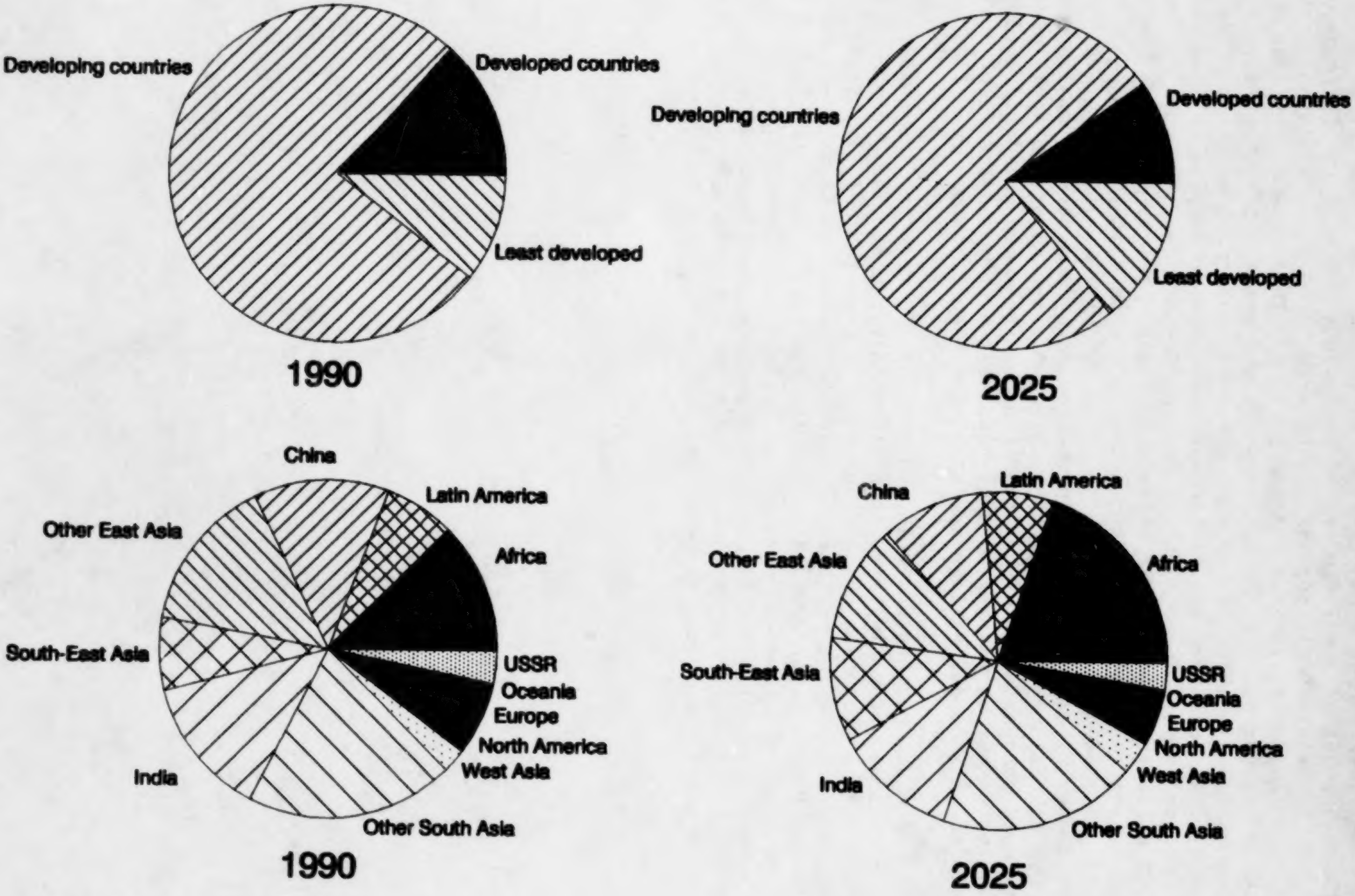
### 3. Dependency ratio

In mid-1990, one out of every three persons in the world was a child (less than 15 years of age), one out of five was a youth (15 to 24 years) and one out of 16 was old (over 65). 4/ There were 1.7 billion children in the world in 1990 compared with 1.4 billion in 1970. Their number will reach 2 billion a few years after the beginning of the next century. Of all children under 15 in 1990, 85 per cent lived in developing countries (see figure I.2). At the other end of the spectrum, the proportion will be about 20 per cent or less in North America, Europe, Oceania and the Union of Soviet Socialist Republics. Located in between is Latin America, for which the proportion under age 15 is projected to be 26 per cent in 2025.

The number of elderly persons in the world is considerably smaller than the number of children. However, the projected increase of the world elderly population is substantially faster than that of the world child population. In 1990, the number of persons aged 65 years and over was 328 million. It is projected to grow to 828 million in 2025, more than 2.5 times (see figure I.3).

The number of persons under 15 and over 65 divided into the number of persons aged 15-64 years is termed the dependency ratio. The dependency ratio in the world as a whole was 63 per cent in 1990 (see table I.6). It is expected to decline to 62 per cent in 2000 and further to 52 per cent in 2025. In 1990, the dependency ratio was about 33 per cent higher in developing countries than in developed countries, reflecting higher fertility in the former group. In Africa, it was 93 per cent and in Europe only 49 per cent. The dependency ratios for Asia and Latin America were 69 per cent and 61 per cent, respectively.

Figure I.2. Estimated and projected distribution of world population under 15 years



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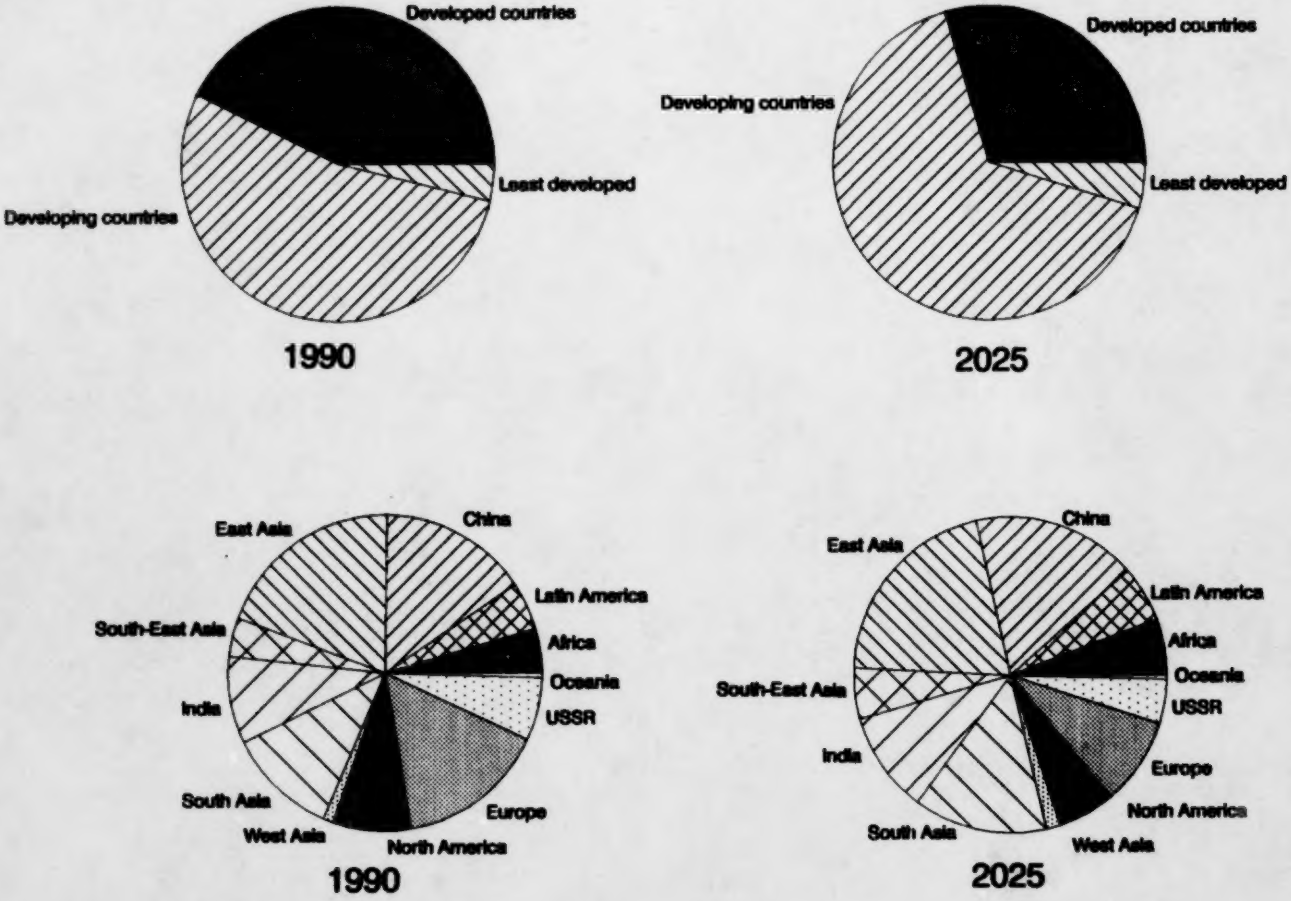
Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4).

Figure I.3. Estimated and projected distribution of world population aged 65 years and over



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Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4).

Table I.6. Dependency ratio, total, under 15 and 65 and over, by major area and region, 1980-2025

(Percentage)

| Major area and region | 1980 Total | 1980 Under age 15 | 1980 Age 65+ | 1990 Total | 1990 Under age 15 | 1990 Age 65+ | 2000 Total | 2000 Under age 15 | 2000 Age 65+ | 2025 Total | 2025 Under age 15 | 2025 Age 65+ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| World | 69.9 | 59.8 | 10.1 | 62.6 | 52.6 | 10.1 | 61.8 | 50.8 | 11.0 | 52.1 | 37.3 | 14.8 |
| Developed countries | 53.0 | 35.4 | 17.6 | 50.1 | 32.0 | 18.1 | 50.7 | 30.1 | 20.6 | 58.2 | 28.2 | 30.0 |
| Developing countries | 76.6 | 69.5 | 7.1 | 66.7 | 59.3 | 7.4 | 64.9 | 56.6 | 8.3 | 51.0 | 38.9 | 12.1 |
| Africa | 91.6 | 85.8 | 5.8 | 92.5 | 86.7 | 5.8 | 90.3 | 84.4 | 5.8 | 63.7 | 57.0 | 6.7 |
| Asia | 72.5 | 64.9 | 7.6 | 61.0 | 52.9 | 8.0 | 59.8 | 50.5 | 9.3 | 47.4 | 33.3 | 14.1 |
| Latin America | 77.5 | 69.7 | 7.7 | 68.5 | 60.4 | 8.1 | 61.4 | 52.7 | 8.7 | 52.2 | 39.1 | 13.1 |
| Northern America | 50.8 | 34.0 | 16.8 | 51.2 | 32.4 | 18.8 | 48.9 | 29.9 | 19.1 | 60.4 | 28.5 | 31.9 |
| Europe | 54.9 | 34.6 | 20.3 | 49.2 | 29.2 | 20.0 | 50.2 | 27.8 | 22.4 | 57.7 | 26.0 | 31.7 |
| Ocean | 59.5 | 46.8 | 12.8 | 55.1 | 41.1 | 14.0 | 52.8 | 38.3 | 14.5 | 53.0 | 31.7 | 21.2 |
| USSR | 53.9 | 38.1 | 15.8 | 54.0 | 39.2 | 14.8 | 54.5 | 36.5 | 18.0 | 55.4 | 32.4 | 23.0 |

Source: World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4), table 46.

### 4. Pressures on land and employment opportunities

One of the most prevalent concerns about population growth is that it will result in steadily increasing pressure on available land. Another one is that it will produce ever more workers in need of employment. But it must be remembered that a growing population also increases demand and that adaptation to increasing population was a part of the great upswing of the industrial revolution.

The pressure on the land leads to the creation of new arable land, the adoption of new agricultural technologies and rural to urban migration. As a result, the change in the ratio of agricultural population to arable land between 1978 and 1987 presents a mixed experience (see table I.7). In Africa, where population was growing most rapidly, it rose in 26 countries, but also declined in 11 countries. In Asia, it rose in varying degrees in eight countries but fell in four countries, and in Latin America, it declined in 12 countries and rose in only nine.

The rapid growth of the labour force in developing countries means that more than a billion jobs have to be created in the course of the 1990s and this in turn means that development must accelerate. Once again, the situation in sub-Saharan Africa is especially disturbing (see figure I.4). Levels of unemployment and underemployment are already high, but there will be a need for 6 million new jobs a year in the 1990s and as many as 10 million new jobs each year at the beginning of the next century to absorb the new entrants in the workforce. The experience of recent years has confirmed that mass unemployment among the young creates a politically explosive situation which is almost bound to result in violence, anarchy and terrorism.

**Table I.7. Agricultural population per hectare of arable land**

| | 1978 | 1987 |
|---|---|---|
| AFRICA | | |
| Algeria | 1.2 | 0.8 |
| Angola | 2.2 | 1.8 |
| Benin | 2.8 | 1.5 |
| Burkina Faso | 1.0 | 2.3 |
| Burundi | 2.8 | 3.4 |
| Cameroon | 0.9 | 1.0 |
| Central African Republic | 0.6 | 0.9 |
| Chad | 1.4 | 1.3 |
| Congo | 0.8 | 1.6 |
| Côte d'Ivoire | 1.6 | 1.8 |
| Ethiopia | 1.8 | 2.4 |
| Gabon | 0.9 | 1.6 |
| Gambia | 1.7 | 3.8 |
| Ghana | 2.1 | 2.5 |
| Guinea | 0.9 | 3.1 |
| Kenya | 5.2 | 7.2 |
| Liberia | 3.3 | 4.5 |
| Madagascar | 2.4 | 2.8 |
| Malawi | 2.2 | 2.5 |
| Mali | 2.7 | 3.4 |
| Mauritania | 6.6 | 6.2 |
| Mauritius | 2.6 | 2.4 |
| Morocco | 1.3 | 1.1 |
| Mozambique | 2.1 | 3.9 |
| Niger | 1.4 | 1.6 |
| Nigeria | 1.7 | 2.1 |
| Rwanda | 4.2 | 5.3 |
| Senegal | 1.7 | 1.0 |
| Sierra Leone | 3.9 | 1.4 |
| Somalia | 2.6 | 5.3 |
| Togo | 1.3 | 1.6 |
| Tunisia | 0.6 | 0.4 |
| Uganda | 1.8 | 2.0 |
| United Republic of Tanzania | 2.7 | 3.8 |
| Zaire | 3.2 | 3.3 |
| Zambia | 0.7 | 1.0 |
| Zimbabwe | 1.7 | 2.2 |
| LATIN AMERICA AND THE CARIBBEAN | | |
| Argentina | 0.1 | 0.1 |
| Bolivia | 0.8 | 0.9 |
| Brazil | 1.2 | 0.5 |
| Chile | 0.4 | 0.3 |
| Colombia | 1.3 | 1.7 |
| Costa Rica | 1.6 | 1.4 |

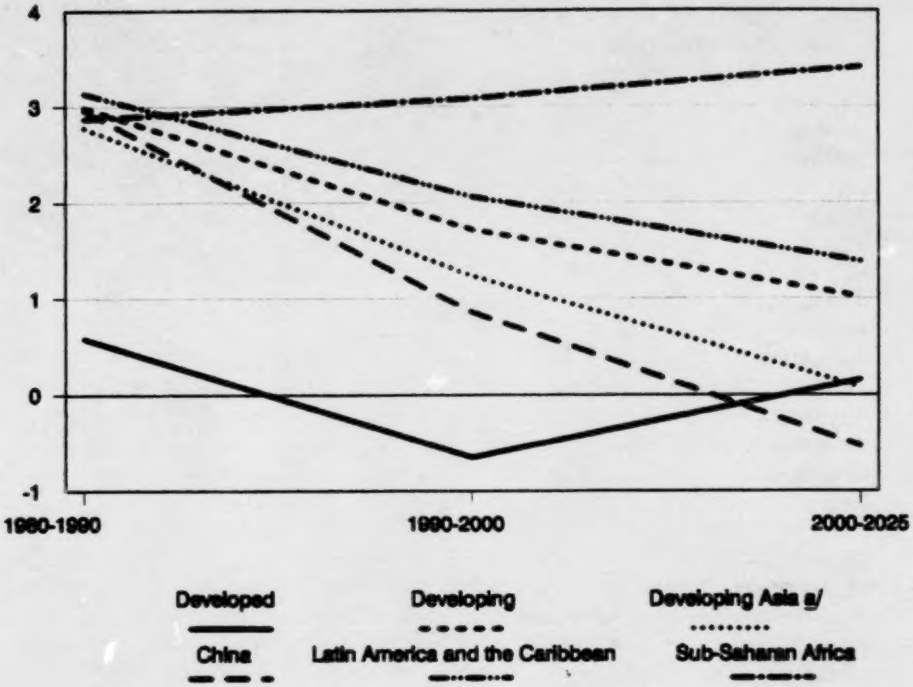
### Table I.7 (continued)

| | 1978 | 1987 |
|---|---|---|
| Cuba | 0.8 | 0.6 |
| Dominican Republic | 2.6 | 1.8 |
| Ecuador | 1.3 | 1.2 |
| El Salvador | 3.5 | 2.6 |
| Guatemala | 2.1 | 2.4 |
| Guyana | 0.5 | 0.5 |
| Haiti | 4.3 | 4.2 |
| Honduras | 1.2 | 1.5 |
| Jamaica | 1.8 | 2.8 |
| Mexico | 1.1 | 1.1 |
| Nicaragua | 0.7 | 1.1 |
| Panama | 1.2 | 1.0 |
| Paraguay | 1.2 | 0.9 |
| Peru | 2.0 | 2.1 |
| Suriname | 1.5 | 1.0 |
| Trinidad and Tobago | 1.2 | 0.8 |
| Uruguay | 0.2 | 0.3 |
| Venezuela | 0.5 | 0.6 |
| ASIA | | |
| Bangladesh | 7.7 | 8.2 |
| Democratic People's Republic of Korea | 3.7 | 3.2 |
| India | 2.5 | 3.0 |
| Indonesia | 5.4 | 3.8 |
| Lao People's Democratic Republic | 3.1 | 3.1 |
| Malaysia | 1.0 | 1.2 |
| Myanmar | 1.8 | 1.9 |
| Nepal | 5.4 | 7.0 |
| Pakistan | 2.1 | 2.9 |
| Philippines | 2.8 | 3.5 |
| Republic of Korea | 6.8 | 5.0 |
| Sri Lanka | 3.6 | 4.6 |
| Thailand | 2.0 | 1.7 |
| Viet Nam | 6.1 | 6.1 |

*Source*: Food and Agriculture Organization of the United Nations, *The State of Food and Agriculture 1980* and *1990* (Rome).

**Figure I.4. Projected average annual growth rates for age group 20-34, 1980-2025**

(Percentages)



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Source: International Labour Organisation, Economically Active Population: Estimates and Projections, 1950-2025, 3rd edition (Geneva, 1986).

a/ Excluding China.

## 5. Urbanization

Towns and cities have grown beyond the capacity of local governments to deliver even basic essential services. In developed countries, the urban population doubled from 448 million in 1950 to 875 million in 1990. The urban population in developing countries more than quintupled over the same period, from 285 million to 1.6 billion by 1990. In Latin America, 72 per cent of the people live in urban areas, but 37 per cent of the people in all developing countries and only 20 per cent in the least developed countries live in urban areas (see figure I.5).

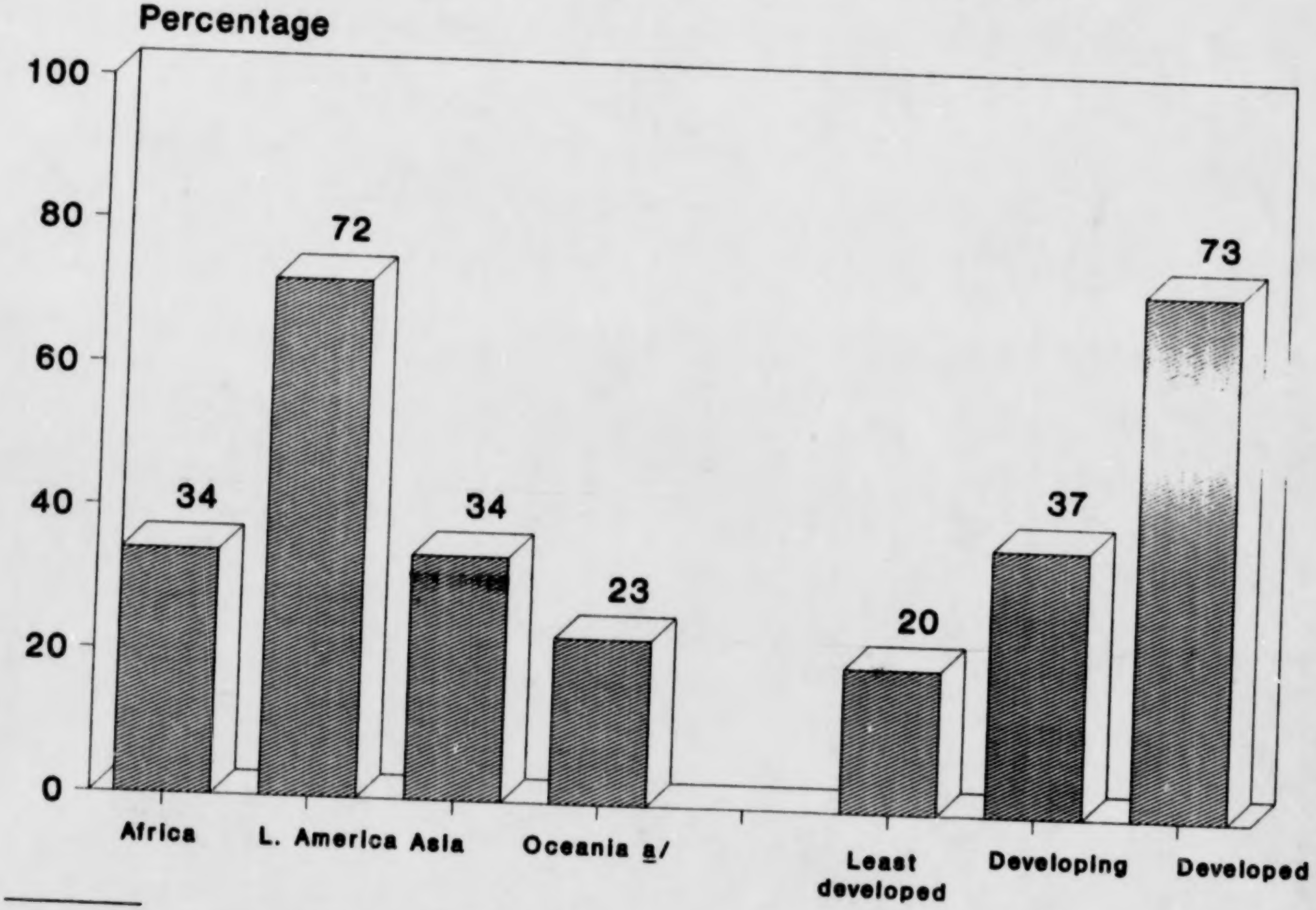
In 1990, 33 per cent of the world urban population resided in agglomerations containing 1 million or more inhabitants and 13 per cent in agglomerations of 5 million or more. 5/ The number of urban agglomerations with a population of more than 5 million was 34, and 22 of them were in developing countries. By the year 2000, about three fourths of populations in urban agglomerations will be in developing countries.

The rate of growth of large urban agglomerations in general has been declining. Yet, the average annual growth rate during 1985-1990 was above 3 per cent per annum in 12 of the 34 urban agglomerations containing 5 million or more persons, and 3 of the 12 agglomerations, each with a population of 10 million or more, have annual population growth rates that reach 3 per cent.

The Population Division of the Department of Economic and Social Development of the United Nations Secretariat defines urban agglomerations with 8 million or more inhabitants as mega-cities. 6/ In 1990, 14 of the 20 mega-cities were in developing countries. Between 1975 and 1990, Mexico City, whose population surpassed that of Tokyo, became the largest urban agglomeration in the world. In 1990, Mexico City had 20.2 million inhabitants, exceeding the populations of Tokyo (18.1 million), Sao Paulo (17.4 million) and New York (16 million) (see figure I.6).

Urbanization in developing countries gives rise to several concerns. Brazil, China, India, Mexico and the Republic of Korea are among the world's largest producers of many manufactured goods. Their manufacturing plants are concentrated in urban areas and lack safe means of waste disposal. In Thailand, a high proportion of all industry is located in Bangkok or its neighbouring provinces. This region has three quarters of all factories dealing with hazardous chemicals. Within Bangkok are five of Thailand's seven lead-smelting plants and over 90 per cent of its chemicals, dry-cell battery, paint, pharmaceutical and textile manufacturing, all of which are heavy pollutants. 7/ Environmental pollution also emanates from activities other than industrial pollution. Large proportions of the population are not served by sewers and garbage disposal, which adds greatly to land- and water-pollution problems.

Figure I.5. Percentage of total population in urban areas, 1990



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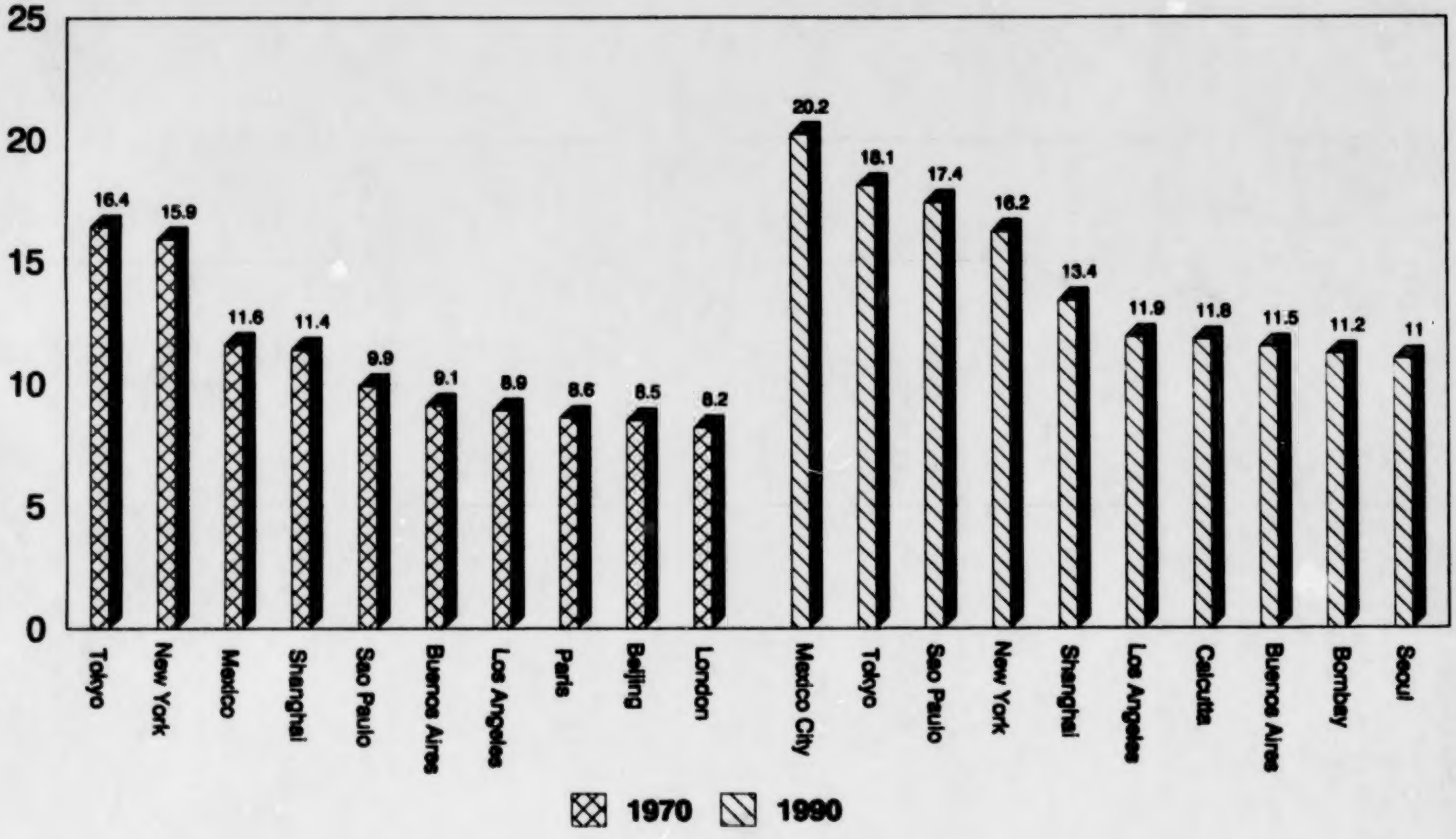
Source: World Urbanization Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.11).

a/ Excluding Australia and New Zealand.

Figure I.6. World's largest urban agglomerations (with 8 million or more inhabitants in 1970 and 1990)



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Source: World Urbanization Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.11).

Most cities in the developing world have also become loci for the most degrading poverty, with vast throngs of people living on the margins of survival. Of every 100 new households established in urban areas in developing countries during the second half of the 1980s, 72 were located in shanties and slums (92 out of every 100 in Africa). 8/ Today, an estimated 1.2 billion people - almost 23 per cent of the world population and 60 per cent of developing countries' city-dwellers - live in squatter settlements, often shanty towns made from cardboard, plastic, canvas or whatever other material is available. The number of urban households in developing countries without safe water increased from 138 million in 1970 to 215 million by 1988, and those without adequate sanitation rose from 98 million to 340 million. 9/ Rural environmental problems such as deforestation, soil erosion and water pollution are also linked to urban growth. 10/ Deforestation takes place to satisfy the demand for fuelwood or charcoal from city inhabitants and enterprises.

Traffic congestion in Mexico City results in a substantial loss of economic productivity. Mexico City's most serious environmental problem is atmospheric pollution, which is estimated to have increased by 150 per cent over the past 10 years. 11/ Motor vehicle emissions are a major contributor to air pollution, but pollution from some 35,000 factories is also significant. High levels of atmospheric pollution, inadequate municipal services, lack of green space and long journeys to work drastically reduce the quality of life in Mexico City. 12/

Governments in developing countries are eager to slow down metropolitan growth, to promote the growth of small towns and intermediate cities and to develop rural areas in order to retain or attract rural populations. However, costlier population redistribution policies, such as the relocation of capital cities, the promotion of counter-magnet cities, the establishment of new towns and land colonization, have been abandoned or cut back during adverse economic conditions. It has been realized that physical and spatial development policies alone will have little impact on changing patterns of urban development unless reinforced by other national economic and social policies. China is one of the few countries that have managed to slow the growth of large metropolitan areas. During much of the 1970s, investments were directed to rural areas, agricultural productivity rose significantly, industry was decentralized and strict family planning and population control policies lowered the overall rate of population growth. 13/

In 1991, more than 10,000 towns scattered throughout the country were on the verge of becoming small cities and another 40,000 heavily populated villages would become towns. 14/ The rapid development of rural industrial enterprises has increased the pace of urbanization. Agricultural reforms in 1978 freed millions of farmers to undertake township and village enterprises.

In Africa, structural adjustment programmes depressed incomes in urban areas. Average labour earnings in the urban public sector of Africa declined by 30 per cent during the first half of the 1980s and the number of workers employed in the formal private sector fell by 16 per cent. 15/ Currency devaluation and reduced government taxes on agricultural produce generally improved the domestic terms of trade in favour of rural areas. One consequence of this shift in relative incomes 16/ was that out-migration from rural areas declined and some degree of reverse migration occurred. In

Nigeria, after the drop in oil prices in mid-1980, a 24 per cent increase in the rural labour force took place as a result of retrenched urban workers returning to the farms of their kin and because out-migration declined as word about the lack of work opportunities spread throughout rural communities. 17/

## B. International migration

### 1. Changing immigration pressures

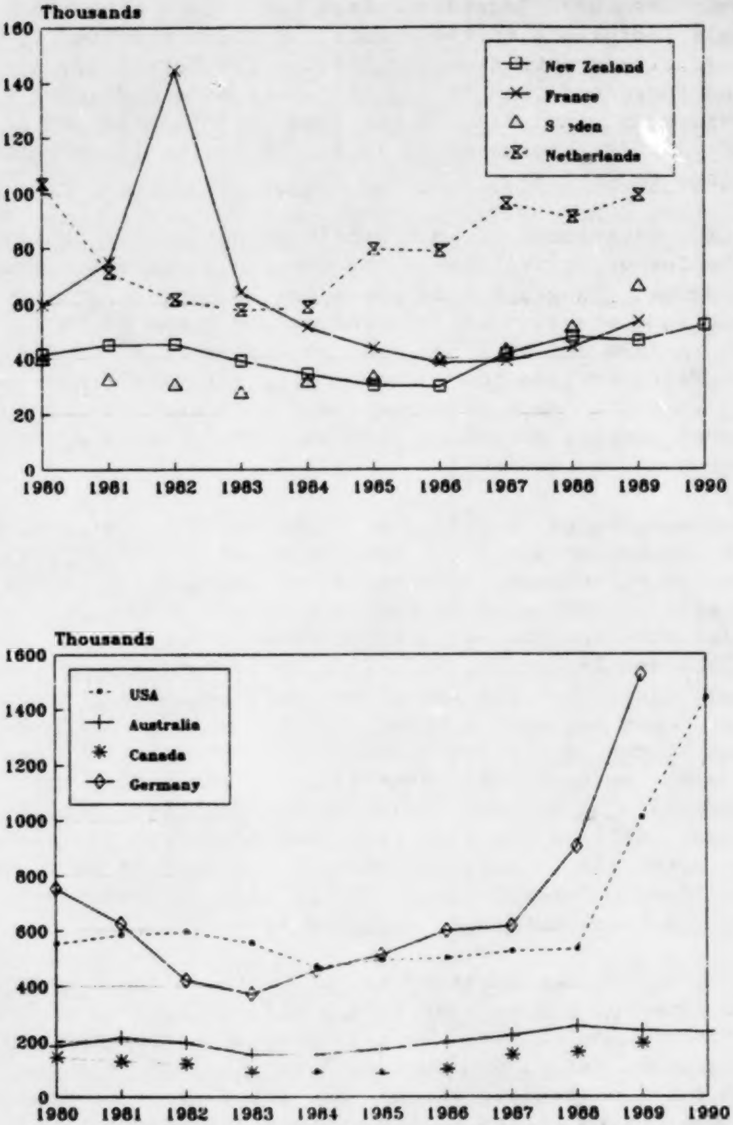
Differential rates of growth of population and economic opportunities cause major movements of population among regions and countries. Such movements are not new. Until technology permitted people in large numbers to cross oceans, these movements were over land and over narrow stretches of sea. Large sailing vessels and later steamships with steel hulls made it possible for large numbers of people to cross the oceans at little peril. In the twentieth century, air travel has made movement even cheaper and safer. The Americas came to be populated by people of European and African descent. Europeans also settled in parts of Africa, in Australia and New Zealand. Indians travelled to many parts, including Fiji, Guyana, Mauritius and Trinidad and Tobago. Chinese, though in smaller numbers, travelled to many parts of the world. In the twentieth century, mass net migration until 1960 was from developed regions in the North to developing regions in the South. There was a dramatic change in the 1950s when the dominant flow originated in developing countries, with developed countries in the North as their destination.

Economic betterment has always been a dominant objective in these mass movements. 18/ Most European colonists in the Americas, as well as Indians who migrated in search of work, were moved by opportunities for economic betterment. Others, like the Irish who fled the "potato famine", were driven by desperate economic circumstances at home. They were economic refugees in modern terminology. Nonconformists and Jews fled persecution in Europe. Africans in North America were sold into slavery and Indians moved as indentured labour to Sri Lanka. Still others were penal offenders who were deported as far as to Australia.

In recent years, there have been several significant changes in mass migration between countries. After having stabilized - even declined as in the case of Germany - during the first half of the 1980s, immigration flows to some developed countries increased 19/ during the last three years of the 1980s. The most dramatic flows were into the United States of America and Germany (see figure I.7). There were new destinations, such as Japan and Taiwan Province of China, to which migrants from other parts of Asia were attracted. Countries in southern Europe, such as Greece, Italy and Spain, which had been countries of net emigration, became countries of net immigration. Temporary immigration to South Africa, seeking work in gold mines and elsewhere, slowed down. After the major upheaval in the Persian Gulf region in 1990-1991, labour migration to West Asia also slowed down. The size and composition of immigrant (foreign-born) populations changed substantially. High unemployment in most developing countries made for increasing animosity towards immigrants.

Immigration into the former Federal Republic of Germany has increased ever since 1983. The largest gains were in 1988 and 1989; statistics for 1990 are not yet available. The number of immigrants rose to 900,000 in 1988 and exceeded 1.5 million in 1989, from 600,000 on average during 1986-1987. The bulk of them came from Eastern Europe and the former Soviet Union. Among them, a large proportion were of German ancestry (Aussiedler), with a right to German citizenship, including those from the former German Democratic Republic. From 1987 to 1988, the number of ethnic Germans entering the former

Figure I.7. Immigration flows to selected countries, 1980-1990



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Sources: 1989 Demographic Yearbook (United Nations publication, Sales No. E/F.90.XIII.1); Netherlands, Central Bureau voor de Statistiek, Statistisch Jaarboek 1991; Sweden, Statitiska Centralbyran, Statistical Abstract of Sweden 1991; New Zealand, Dept. of Statistics of New Zealand, Demographic Trends 1990; United States, Department of Commerce, Bureau of Census, Statistical Abstract of the United States 1990; France, INSEE, Annuaire Statistique de la France 1990; Australia, Bureau of Statistics, Australian Demographic Statistics (various issues); and Germany, Statistischen Bundesamtes, Statistiches Jahrbuch 1991.

Federal Republic of Germany increased by 100,000 to reach 213,000 - most of them from Poland, the former Soviet Union and the former German Democratic Republic. In 1989, 390,000 entered the former Federal Republic of Germany, as did 363,000 ethnic Germans. Together, these two groups accounted for about 50 per cent of all immigrants to the country in 1989, compared to 28 per cent the previous year. Immigrants from outside Eastern Europe and the former Soviet Union also increased, but at significantly more modest rates. Non-European immigrants, including people from Turkey, totalled 213,000 in 1988 and 245,000 in 1989, representing 24 and 16 per cent, respectively, of all immigrants (see table I.8).

The continuing deterioration in economic conditions in Eastern European countries and the former Soviet Union, the uncertainties associated with the political and economic changes taking place in the region, and the relaxation of travel restrictions played a role in increasing these flows. Flows from Poland decreased in 1990 and 1991, as did the number of Aussiedler returning to Germany. 20/ Migrants from the former Soviet Union were the largest group entering Germany in 1991. Many Ukrainians and Russians also moved to Poland. But the much feared massive movements from Eastern Europe and the former Soviet Union have not occurred so far.

Finally, another source of pressure on Germany's borders is the increasing number of asylum seekers. The number of asylum seekers in Germany ranged widely during the decade, reflecting the emergence of hostile political environments in several countries during particular periods. In 1989, the number reached 121,000, the highest inflow since 1980, and was surpassed in both 1990 (193,000) and 1991 (256,000). 21/ It is commonly believed that many of these refugees' claims are not legitimate and that they are actually escaping economic chaos and poor economic prospects in their home countries. Only 6.9 per cent of the asylum applications presented in 1991 were considered genuine by the German authorities. However, one cannot deny that there has been an intensification of ethnic, religious and political conflicts in many countries (see chap. XII) in the late 1980s which renders the search for political asylum authentic in many instances. The fate of many Bosnians, Croats and Slavs fleeing "ethnic cleansing" in what was Yugoslavia is the most recent such instance (see section on refugees below).

The number of immigrants admitted to the United States, refugees excluded, jumped from 640,000 in 1988 to 1.1 million in 1989 and reached a record high of 1.5 million in 1990, mainly consequent upon the implementation of the 1986 Immigration Reform and Control Act. The 1986 Act, among other things, provided for the legalization of the status of undocumented migrants who had entered the United States before January 1982 and agricultural labourers who had worked in the country during 1984-1986. These categories added an estimated 480,000 and 880,000, respectively, to the number of legal immigrants in 1989 and 1990. Without them, the flow of immigrants during these years would be roughly of the same magnitude as at the beginning of the 1980s, about 550,000 per year. Among the latter, family reunion is the major legal reason for admitting new arrivals in the United States. 22/ These numbers are substantially below the persistently high immigration, exceeding 1 million, in the late nineteenth century.

## Table I.8. Ethnic Germans immigration to Germany, 1984-1991 a/

(Thousands)

| | Annual average 1968-1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|---|---|---|---|---|
| TOTAL | 38.5 | 36.5 | 39.0 | 42.8 | 78.5 | 202.7 | 377.1 | 397.1 | 222.0 |
| Poland | 21.7 | 17.5 | 22.1 | 27.2 | 48.4 | 140.2 | 250.3 | 113.3 | 40.1 |
| USSR | 4.5 | 0.9 | 0.5 | 0.8 | 14.5 | 47.6 | 98.1 | 147.5 | 147.3 |
| Bulgaria | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | .. |
| Yugoslavia | 0.6 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 1.5 | 0.5 | .. |
| Romania | 8.2 | 16.6 | 14.9 | 13.1 | 14.0 | 12.9 | 23.4 | 107.2 | 32.2 |
| Czechoslovakia | 2.9 | 1.0 | 0.8 | 0.9 | 0.8 | 0.9 | 2.0 | 1.3 | .. |
| Hungary | 0.4 | 0.3 | 0.5 | 0.6 | 0.6 | 0.8 | 1.6 | 1.0 | .. |
| Others | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | .. |
| Memo item: | | | | | | | | | |
| East Germans entering the Federal Republic of Germany b/ | | 38.7 | 26.3 | 26.2 | 19.0 | 39.8 | 343.9 | n.a. | n.a. |

Sources: Statistiches Bundesamt, Statistisches Jahrbuch 1991 (Wiesbaden, 1991); Economic Commission for Europe, Economic Survey of Europe in 1991-1992 (United Nations publication, Sales No. E.92.II.E.1).

Note: The term ethnic German (Aussiedler) refers to those people of German ancestry formerly living in Eastern Europe and the USSR.

a/ Refers to the Federal Republic of Germany up to 1990.

b/ Includes only people processed by the Bundesausgleichsamt.

Immigration in Sweden also increased in the late 1980s, although at a more modest rate than in the United States and Germany. The number of immigrants entering Sweden increased from 51,000 in 1988 to 66,000 in 1989. The immigrants came mostly from Denmark, Finland and Norway. Although the number of immigrants to New Zealand also increased after 1986, net migration to New Zealand has been negative since 1975, except in 1983.

During the 1980s, Italy and to a less extent Spain and Greece emerged as labour-importing countries. Descendants of former emigrants to Latin America were given the right to Italian and Spanish citizenship. The number of illegal immigrants entering these countries is believed to have increased significantly. Seasonal workers from the Maghreb countries (Morocco, Algeria and Tunisia) have for some time come to work in Italian fishing ports and in agriculture, as have Poles and Yugoslavians. They have become more visible lately as they reach the big cities and become street vendors. There was also a highly visible inflow of Albanians in 1991. Albanians, particularly those of Greek descent, headed for Greece and more than 60,000 of them legally entered that country during the first nine months of 1991. 23/ The relative economic prosperity of southern European countries as compared to the economies in transition and developing countries acted as a magnet.

Net flows of migrants to Japan have increased steadily since 1979. In the second half of the 1980s, the number rose substantially. The net flow of foreigners (arrivals less departures) was estimated at 50,000 in 1986 and rose to 150,000 in 1990. However, the number of illegal residents must also have increased substantially. In fact, the number arrested by the authorities in 1990 was five times that in 1985. Among those arrested, Asians, in particular from Bangladesh and Pakistan, figured prominently.

There are several reasons for the increase in the number of illegal workers in Japan. The Japanese economy expanded considerably, raising labour demand. As the Japanese population became more educated, it became cheaper to employ immigrants in strenuous and menial work. However, Japanese immigration laws, as revised in December 1990, made it easier for foreign scientists, engineers and other professionals to work in Japan and cracked down on unskilled immigrants. 24/ Consequently, the number of undocumented unskilled immigrant workers soared. 25/ The slow-down in the demand for immigrant labour in the oil-producing countries of West Asia also induced workers in emigrant countries to turn to Japan as a destination.

In South Africa, the number of foreigners employed in the mining sector has declined. The share of foreigners in the total labour force in the gold and coal mines fell from 68 per cent in 1975 to 41 per cent in 1985. Mechanization in the mines, the Government's decision to reduce the country's dependence on foreign labour in view of increasing domestic unemployment, and political considerations contributed to this result. Lesotho and Mozambique are the major suppliers of foreign labour to South Africa. 26/ The Government banned the recruitment of new workers and the renewal of contracts of certain categories of mine workers from Mozambique during the period October 1986 to October 1988. 27/

Migration to West Asia is estimated to have declined in the late 1980s as suggested by the smaller outflow of people from the major labour-sending countries of South Asia, particularly India and Pakistan. 28/ The most dramatic development in a migrant population took place consequent upon the

Iraqi invasion of Kuwait in August 1990. Some 2.5 million immigrant workers and dependants were forced to flee the Islamic Republic of Iran, Iraq and Kuwait (see table I.9). 29/ Most of them were from Egypt, Jordan and Yemen. Those returning to Bangladesh, India, Pakistan and Sri Lanka exceeded 100,000. There was a sudden drop in the flow of labour remittances (see below). Governments also had to bear the costs of repatriation, including outlay for the subsistence of returnees. Workers faced the prospect of prolonged unemployment. In Jordan, the unemployment rate rose to over 25 per cent in 1991. 30/ Costs related to the absorption and reintegration of the Jordanian/Palestinian refugees were estimated at $3 billion for the period 1992-1994. 31/ Nationals of Yemen and Jordan and Palestinians have not been permitted to return to work in Kuwait. 32/ It is not yet clear whether countries in the Persian Gulf area will continue to depend on foreign labour as much as previously.

Table I.9. Estimated number of returnees from the Persian Gulf region

(Thousands)

| Country | Number of returnees |
|---|---|
| Bangladesh | 100 |
| Egypt | 500 |
| India | 200 |
| Jordan | 400 |
| Lebanon | 50 |
| Mauritania | .. |
| Morocco | .. |
| Pakistan | 140 |
| Philippines | 60 |
| Somalia | .. |
| Sri Lanka | 100 |
| Sudan | 30 |
| Syrian Arab Republic | 50 |
| Thailand | 10 |
| Tunisia | .. |
| Viet Nam | 16 |
| Yemen | 850 |
| Yugoslavia | 4 |
| TOTAL | 2 510 |

Source: Note by the Secretariat on the economic, social and environmental consequences of the situation between Iraq and Kuwait and its short-, medium- and long-term implications (E/1991/102).

## 2. Labour remittances: still an important source of foreign exchange

Table I.10 presents data on the proportion of foreign exchange earnings originating from labour income, workers' remittances and migrants' transfers in total foreign exchange earnings (the sum of merchandise exports, factor and non-factor service incomes and private transfers). 33/ Countries where this ratio is less than 3 per cent in any of the three years listed have not been included.

Labour remittances are an important source of foreign exchange for many countries. In several, including Cape Verde, Egypt, Jordan, Lesotho, Samoa and Yemen, they are more significant than earnings from any individual commodity export. 34/ Any disruption to this flow can cause serious balance-of-payments problems.

In Mexico, the share of labour remittances quadrupled from 1985 to 1990, largely towards the end of the decade. This gain in remittances seems to be associated with the factors that influence the decision to send money back home through official channels: the existence of a premium in the parallel market for foreign exchange and the interest rate differential between home and host money markets. When the cost to send the money unofficially is higher than the premium paid by the parallel market, a migrant will most likely send his or her money through official channels. The larger the real interest rate differential in favour of the home country, the greater the incentive to send funds home rather than keep them in the host country. Economic reforms in Mexico at the end of 1987 stabilized the exchange rate and substantially raised domestic interest rates in real terms. Both factors induced savings to be remitted to Mexico rather than be invested elsewhere. 35/ It is also probable that the regularization of the status of many Mexican migrants in the United States in 1989 and 1990 removed inhibitions to send savings to Mexico through official routes. Disruptions to the flow of migrants' transfers to home countries owing to the Iraq-Kuwait conflict will probably be reflected in figures for 1991. In the Sudan, labour remittances in 1990 were $14 million compared to $417 million in 1989.

## Table I.10. Labour remittances as a share of total foreign exchange earnings, 1981, 1985 and 1990

(Percentage)

| Country | 1981 | 1985 | 1990 |
|---|---|---|---|
| Algeria | 2.9 | 2.2 | 2.5 |
| Bangladesh | 26.8 | 28.2 | 26.8 |
| Benin | 11.8 | 8.9 | 11.0 a/ |
| Botswana | 12.1 | 3.5 | 2.5 |
| Burkina Faso | 42.3 | 42.2 | 30.9 |
| Cape Verde | 54.3 | 38.8 | 39.4 b/ |
| Cyprus | 6.9 | 5.3 | 3.2 |
| Democratic Yemen | 68.2 | 73.0 | 39.8 b/ |
| Dominican Republic | 10.7 | 15.3 | 13.5 |
| Egypt | 23.9 | 30.6 | 28.5 |
| El Salvador | 7.0 | 14.3 | 20.1 b/ |
| Haiti | 34.0 | 21.9 | 32.8 |
| India | 15.9 | 15.6 | 12.0 b/ |
| Israel | 5.6 | 2.2 | 4.3 |
| Jamaica | 7.1 | 11.2 | 9.9 |
| Jordan | 33.0 | 33.2 | 20.8 b/ |
| Lesotho | 76.2 | 79.2 | 77.1 |
| Mali | 19.2 | 22.2 | 21.6 |
| Mexico | 1.2 | 1.6 | 5.8 |
| Morocco | 24.7 | 23.5 | 24.1 |
| Pakistan | 37.1 | 41.2 | 22.6 |
| Philippines | 9.1 | 10.0 | 11.0 |
| Samoa | 50.3 | 46.7 | 49.0 |
| Senegal | 6.4 | 6.4 | 5.4 |
| Sri Lanka | 14.3 | 15.1 | 14.4 |
| Sudan | 23.3 | 23.9 | 11.0 |
| Swaziland | 8.0 | 17.5 | 13.6 |
| Syrian Arab Republic | 13.7 | 12.1 | 6.9 |
| Thailand | 5.1 | 8.6 | 3.1 |
| Tunisia | 8.9 | 9.1 | 10.2 |
| Turkey | 29.3 | 13.1 | 12.9 |
| Vanuatu | .. | 8.2 | 7.0 |
| Yemen | 71.8 | 79.8 | 23.6 b/ |
| Yugoslavia | 20.1 | 18.1 | 30.4 |

Source: Department of Economic and Social Development, based on data from the International Monetary Fund.

a/ 1988.

b/ 1989.

## 3. An increasing foreign population?

In the present climate of economic recession, objections to liberal immigration policies have risen to the top of the political agenda in many European countries. Immigrants are seen as competing with natives for employment, housing and welfare benefits, and strong feelings have been aroused by the insistence of new groups of immigrants to observe ethnic customs that run counter to the customs or even the laws of the host country.

The composition of the stock of foreigners living in European countries has changed during the past 15 to 20 years (see table I.11). In the early 1970s, nationals of other European countries formed the vast majority of the foreign population living in European countries, ranging from 95 per cent in Sweden to 51 per cent in the Netherlands. At that time, immigrant labour came mainly from Greece, Italy, Portugal and Spain. During the 1980s, Europeans became a smaller proportion of the foreign population. The number of Greeks and Italians was halved in Sweden from 1970 to 1989 as was the number of Spaniards in the former Federal Republic of Germany during the same period. The stock of Spanish and Italian immigrants was also considerably reduced in France. Yet Europeans formed the bulk of foreigners in Belgium, Germany, Sweden and Switzerland. In Switzerland, the proportion increased from 88 per cent in 1974 to 89 per cent in 1989. However, according to a survey conducted in the 12 member countries of the European Economic Community (EEC) in 1988, European immigrants were rarely perceived as the dominant foreign group. 36/ Non-Europeans, especially Africans from the Maghreb countries, are the largest group in France and Turks the largest in the Netherlands.

Changes in the composition of the foreign population may be one reason behind the recent increase in xenophobia in some of these countries. It is often claimed that immigrants from different racial, religious and cultural backgrounds present a threat to the values of the native society, although similar concerns were voiced in the past when immigration was predominantly white and Christian. 37/

Antagonism towards foreigners usually intensifies in the face of deteriorating economic conditions. Immigrants are common scapegoats for the real or imaginary threats that recession and economic difficulties bring. Negative expectations of an uncertain and insecure future tend to exacerbate the problem. The issue is frequently exploited by extremist parties which single out foreigners as the root of economic and political difficulties. 38/ Foreigners, for instance, are generally blamed for the increase in unemployment even if this is a concomitant part of swings in business activity or of adjustment to changing international economic conditions.

Unemployment among the foreign population is usually higher than among the local population. In Germany, during the economic recession of the early 1980s, unemployment among Germans increased from 3.1 per cent in 1980 to 7.5 per cent in 1983, and among foreigners from 4.7 per cent in 1980 to 12.3 per cent in 1983. 39/ In the Netherlands, unemployment of young people from Morocco, Suriname and Turkey increased from 1983 to 1990, while that among the young Dutch contracted. 40/

### Table I.11. Composition of foreign population in selected European countries

(Percentage)

| Origin | Belgium 1970 | Belgium 1989 | France 1970 | France 1985 | Germany 1974 | Germany 1989 | Netherlands 1974 | Netherlands 1990 | Sweden 1970 | Sweden 1989 | Switzerland 1974 | Switzerland 1989 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AFRICA | 8.0 | 20.0 | 34.6 | 44.5 | 1.7 | .. | 10.5 | 23.1 | 0.6 | 3.1 | .. | .. |
| Algeria | 0.9 | 1.2 | 20.7 | 23.7 | .. | 0.1 | .. | .. | .. | .. | .. | .. |
| Morocco | 5.6 | 15.7 | 7.6 | 5.9 | .. | 1.3 | 10.5 | 23.1 | 0.2 | 0.3 | .. | .. |
| AMERICAS | 2.5 | .. | 1.2 | .. | 2.4 | .. | 3.8 | 1.7 | 1.9 | 7.8 | 1.0 | .. |
| ASIA | 3.9 | .. | 3.0 | 4.2 | 27.7 | 41.3 | 23.6 | 32.8 | 2.0 | 19.7 | 2.5 | .. |
| Turkey | 2.9 | 9.3 | 1.5 | 4.2 | 24.9 | 33.3 | 19.8 | 29.8 | 1.0 | 5.3 | 2.5 | 5.7 |
| EUROPE | 83.5 | 63.6 | 61.1 | 37.4 | 66.2 | 48.0 | 50.9 | 25.7 | 94.5 | 66.9 | 88.5 | 89.3 |
| Non-EEC | 6.7 | 2.2 | 4.8 | .. | 25.5 | 20.6 | 5.1 | 2.1 | 72.7 | 51.6 | 7.3 | 18.4 |
| Yugoslavia | 0.7 | 0.6 | 2.0 | .. | 17.2 | 12.6 | 4.1 | 2.0 | 9.0 | 8.7 | 3.3 | 11.2 |
| Poland | 2.6 | .. | 2.7 | .. | 1.1 | 4.5 | .. | .. | 1.0 | 3.2 | .. | 0.5 |
| EEC | 76.7 | 61.4 | 52.8 | 37.4 | 40.8 | 27.4 | 45.8 | 23.7 | 21.9 | 15.3 | 81.2 | 70.9 |
| Italy | 35.8 | 27.3 | 13.5 | 8.0 | 15.3 | 10.7 | 6.2 | 2.6 | 1.9 | 0.9 | 52.1 | 36.5 |
| Greece | 3.2 | 2.4 | .. | .. | 9.8 | 6.1 | 1.3 | .. | 3.4 | 1.5 | 1.0 | 0.8 |
| Portugal | 0.1 | 1.7 | 22.1 | 21.7 | 2.9 | 1.5 | 2.5 | 1.2 | 0.4 | 0.3 | 0.0 | 6.6 |
| Spain | 9.7 | 6.0 | 14.5 | 7.7 | 6.6 | 2.6 | 9.9 | 2.7 | 1.0 | 0.6 | 11.4 | 11.0 |
| OTHERS | 2.2 | 7.0 | 0.0 | 13.9 | 2.0 | 9.3 | 11.3 | 16.7 | 1.0 | 2.5 | 8.0 | 7.5 |
| TOTAL | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| MEMO item: | | | | | | | | | | | | |
| Total foreigners (in thousands) | 696.3 | 880.8 | 3 442.4 | 3 462.2 | 4 127.4 | 4 845.9 | 316.3 | 642.0 | 411.3 | 456.0 | 1 064.5 | 1 040.3 |

Sources: World Population Monitoring, 1989 (United Nations publication, Sales No. E.89.XIII.12); and Organisation for Economic Cooperation and Development, Continuous Reporting System on Migration (SOPEMI) 1990 (Paris, 1991).

The reasons for higher unemployment among immigrants are many. Most are unskilled or semi-skilled workers, usually concentrated in ailing sectors of the economy. When changes in technology and production structure finally arrived in those sectors, factories were shut down and unemployment soared. Immigrants lacking skills could not move into the more dynamic sectors of the economy. Often, foreigners are predominant in collective dismissals. Nationals are more likely to be offered the benefits of voluntary leave, including financial compensation and the possibility of early retirement.

Even in the United States of America, where upward mobility among immigrants from developing countries is higher than in Europe, newcomers who lack skills face difficulties in finding jobs in manufacturing and tend to end up in poorly remunerated parts of the service sector. 41/ Although employment in manufacturing has recovered somewhat in the United States since 1987, the newly created jobs are in the technologically more sophisticated branches of the sector and not available to most immigrants.

In some countries, attempts have been made to upgrade immigrants' skills, especially in the second generation, in an effort to facilitate their integration into the host country. Results have been mixed. Even those who do not face language problems and can complete vocational training successfully may encounter discrimination in the labour market. A recent survey in the Netherlands showed that a third of the personnel officers used criteria other than required technical qualifications in their hiring practices. For example, migrants were not offered a position if their future colleagues were against foreigners or if clients objected to their employment. 42/

Immigrants and their children also encounter obstacles in their access to appropriate training and the children of immigrants may end up in occupations not commensurate with their capabilities. These young adults, in turn, have ambivalent feelings towards the host country and remain attached to the cultural and behavioural patterns of the country of their origin. Such attitudes tend to be less observable among those with better education, a good command of the local language and longer residence in the host country. 43/

It has been argued that immigrants do not in general harm the prospects of the local population in the labour market, although particular groups may be temporarily adversely affected. 44/ Foreign workers are typically employed in activities that are low paid, require few skills, are physically demanding, and employ outdated technology. They are generally concentrated in what nationals consider low-status occupations - another reason for prejudice 45/ - which do not correspond to their aspirations. Therefore, the substitution of nationals for foreigners is limited, and labour shortages in particular sectors of the economy may coexist with unemployment elsewhere owing to segmentation and rigidities in labour markets. 46/ In other cases, generous social security benefits may contribute to make unemployment more attractive than moving backwards on the social ladder by accepting a low-status job.

### 4. Outstanding problems

The rapid growth of youthful populations without productive employment opportunities in developing countries, the political and economic disintegration in the former Soviet Union and in Eastern Europe and the slow growth of the ageing populations in developed countries, all contribute to the continuing flow of migrants to developed countries. There is open hostility against migrant populations. These hostilities compound the serious difficulties immigrants face in integrating into the economic, social and political life of the host country. There are large numbers of undocumented workers whose rights need to be safeguarded.

Difficulties of integration and acceptance have their roots in the immigrants' lack of full legal rights in the country of residence. Immigrants with open rights to work would not accept wages lower than those of the local population in exchange for protection. 47/ Several countries have begun to award such rights. In Belgium, beginning in January 1992, children born to people whose parents were immigrants were automatically granted Belgian citizenship. Those born to immigrants prior to that period have the right to citizenship when they reach 12 years when requested by their parents. Germany has also made it easier for children born in its territory to acquire German citizenship.

Several countries have intensified efforts to legalize the position of undocumented migrants and to impose severe punishments on those hiring illegal immigrants. Italy's Act No. 943 of 27 January 1987 was decreed for this purpose. It was considered a partial failure, as only 95,000 people, 14 per cent of the estimated illegal population, had their situation legalized. While some may have feared losing their jobs, others may have opted to remain clandestine, working in the large informal sector of the Italian economy. 48/ The 1990 amnesty produced better results, with 235,000 people applying to have their position regularized. The American Immigration Reform and Control Act of 1986 also attracted fewer undocumented immigrants than expected. Some developed countries see greater economic assistance to countries from which potential immigrants may come as a means of preventing such flows. This is a rather long-term process whose impact on migrant inflows will not be felt for some time. 49/ In 1990, the United Nations General Assembly adopted the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families. 50/ Very few countries have so far ratified or acceded to this Convention.

## C. Refugees

People have always moved across borders and seas, some voluntarily seeking better lives, others pushed out as refugees by natural disasters, civil strife or expulsion by Governments. Another category of migrants are refugees in their own countries, victims of natural disaster or military conflicts. These immigrants and refugees, whether inland or across borders, are of major economic and social concern both to individual Governments and to the international community at large: to individual Governments because for humanitarian, health and economic reasons, it becomes necessary to divert resources to take care of these people; to the international community, in addition, because of threats to peace and security which arise from tensions between home and host Governments and the rights and entitlements of immigrant workers. This section contains a brief account of the magnitude of the problems of refugees and a survey of policies and programmes addressed to solve them.

### 1. A problem of growing magnitude

The world refugee population increased dramatically during the 1980s and grew further in 1991 and 1992. In 1990, there were 17 million refugees, compared to 9.6 million in 1980. The Persian Gulf crisis created a refugee population of 5 million and the conflict in the former Yugoslavia another 2 million. For the first time since the Second World War, there are again large refugee populations in Europe. The conflicts in the former Soviet Union have also created a considerable number of refugees, although reliable estimates are still hard to come by. There was also an outflow of 200,000 refugees from Myanmar in 1991. The situation improved remarkably in Central America with peace in Nicaragua, although Haiti continued to be a source of refugees. Agreements signed at the Paris Conference on Cambodia in October 1991 initiated a process for the return of refugees to that country. The fall of the Najibullah Government in Afghanistan again opened prospects for a similar return. In Africa, the refugee situation continued to worsen, especially in Angola, Ethiopia, Mali, Mozambique, Somalia and the Sudan. Both famine and warfare drove people from their homes and productive activities and, as in Europe, parties to conflicts stood in the way of humanitarian relief to refugees. Desperate armed gangs regularly looted supplies meant for starving people. Resources of relief agencies, both intergovernmental and voluntary, were extended to their limits in handling problems which had increased vastly both in magnitude and in complexity.

In 1990, there were 5.7 million refugees in Africa (see table I.12). Eighty-six per cent of them originated from Angola, Ethiopia, Mali, Mozambique, Rwanda, Somalia and the Sudan. They have been rendered refugees by two sets of forces: armed conflict and drought. Soldiers and armed bands have destroyed their lives under drought conditions, pushing further more people from a precarious living to helpless refugee status. The intensification of the civil war and the fall of the Mengistu Government in May 1991 sent streams of Ethiopian refugees to Djibouti, Somalia and the Sudan during the early months of 1991. These flows receded by mid-1991 and some returned to Ethiopia. 51/ However, as conflicts between rival groups flared, particularly in the South, and drought and famine conditions gripped the region, the flow of refugees increased once again in early 1992.

In Mozambique, a renewed offensive by the Government against rebels from the Mozambican National Resistance (RENAMO) in 1990 sent some 100,000 refugees into Malawi. The civil war in Liberia at the end of 1989 contributed to large outflows of refugees. One year later, the conflict had displaced 1.5 million people within the country and created over 750,000 refugees who spread out in the neighbouring countries: 300,000 in Côte d'Ivoire, 10,000 in Ghana, 325,000 in Guinea and 125,000 in Sierra Leone. 52/ Although some voluntary repatriation seems to have taken place, at the end of 1991 there were still 240,000 Liberian refugees in Côte d'Ivoire and 397,000 in Guinea. Some settlement between rival factions in Liberia has been arrived at recently; however, it will still take quite some time for refugees to return home safely. 53/

## Table I.12. Refugee population in countries or areas of asylum

| | Early 1985 | Early 1989 | 31 December 1990 |
|---|---|---|---|
| **AFRICA** | 2 929 450 | 4 349 187 | 5 720 455 |
| Algeria | 167 000 | 170 000 | 169 100 |
| Burundi | 256 600 | 267 400 | 268 403 |
| Côte d'Ivoire | 0 | 500 | 300 000 |
| Ethiopia | 59 100 | 680 500 | 772 764 |
| Guinea | .. | .. | 325 000 |
| Malawi | .. | 628 000 | 927 000 |
| Sierra Leone | 200 | 80 | 125 000 |
| Somalia | 700 000 | 600 000 | 600 000 |
| Sudan | 690 000 | 745 000 | 780 000 |
| Uganda | 151 000 | 95 000 | 142 400 |
| United Republic of Tanzania | 178 500 | 266 500 | 265 184 |
| Zaire | 317 000 | 340 700 | 416 435 |
| Zambia | 96 500 | 143 500 | 138 044 |
| Zimbabwe | 46 440 | 174 500 | 122 302 |
| **ASIA** | 5 023 781 | 7 051 860 | 7 973 764 |
| China | 279 750 | 284 018 | 287 000 |
| Hong Kong | 11 896 | 25 749 | 52 041 |
| Iran (Islamic Republic of) | 1 900 000 | 2 800 000 | 4 000 000 |
| Pakistan | 2 500 000 | 3 258 000 | 3 185 265 |
| Thailand | 128 439 | 108 634 | 101 347 |
| **EUROPE** | 674 400 | 766 500 | .. |
| France | 167 300 | 184 500 | .. |
| Sweden | 90 600 | 148 500 | 183 360 |
| Germany | 126 600 | 150 000 | 156 000 |
| United Kingdom | 135 000 | 101 300 | .. |
| **LATIN AMERICA** | 362 400 | 152 500 a/ | 135 561 a/ |
| Costa Rica | 16 800 | 28 600 | 42 433 |
| Mexico | 175 000 | 46 400 | 50 560 |
| South America | 22 200 | 23 400 | 20 985 |

Table I.12 (continued)

| | Early 1985 | Early 1989 | 31 December 1990 |
|---|---|---|---|
| OTHERS | 1 446 500 | 1 475 000 | .. |
| Australia | 89 000 | 91 000 | 97 915 |
| Canada | 353 000 | 380 000 | .. |
| New Zealand | 4 500 | 4 000 | 5 424 |
| United States of America | 1 000 000 | 1 000 000 | .. |
| SUBTOTAL | 10 436 531 | 13 795 047 | .. |
| Palestinian refugees | 2 093 545 b/ | 2 334 637 b/ | 2 422 514 b/ |
| TOTAL | 12 530 076 | 16 129 684 | .. |

Sources: United Nations, Population Newsletter, No. 51 (June 1991); Office of the United Nations High Commissioner for Refugees, "UNHCR activities financed by voluntary funds: report for 1990-1991 and proposed programmes and budget for 1992" (A/AC.96/774), parts I to VI; Report of the Commissioner-General of the United Nations Relief and Works Agency for Palestine Refugees in the Near East, 1 July 1990-30 June 1991 (Official Records of the General Assembly, Forty-sixth Session, Supplement No. 13 (A/46/13)).

a/ Does not include displaced persons; if included, it is estimated that figures for the region would be 1,193,500 for early 1989 and 880,000 at the end of 1990.

b/ Refers to the situation as at 30 June and includes only those people registered by the United Nations Relief and Works Agency for Palestine Refugees in the Near East, which is probably less than the recorded population.

In Africa, several countries are both the source of and the host to large refugee populations. Ethiopia, Somalia and the Sudan are outstanding examples.

Low per capita income in host countries, poor infrastructure and the scarcity of well trained personnel have placed tremendous burdens on host countries. Refugees from Mozambique who fled to Malawi were mostly from rural areas and had ethnic ties with the Malawi population. Many were allowed to settle spontaneously in Malawi villages. By the end of 1990, there were 930,000 refugees in Malawi. Soon, there was no more land for them to cultivate. Health conditions of Mozambican refugees have deteriorated recently and diseases commonly associated with malnutrition have emerged, particularly in the refugee camps located in the south of the country. 54/ Similarly, refugees from Liberia were welcomed by host populations who showed enormous hospitality by sharing their meagre food supplies, shelter and land to farm. Liberian refugees were not put in camps. Two years later, tensions developed between the host population and the refugees, particularly in Côte d'Ivoire and especially in villages and cities farther from the border whose inhabitants do not have ethnic affinities with the refugees. Crime and violence have reportedly increased since the refugees' arrival. The Government of Côte d'Ivoire reacted to these developments by withholding refugee status to Liberians arriving after May 1991, except for those from the Thai region where the conflicts had become more severe. Newcomers were treated as visitors or tourists, and do not qualify for food aid.

The situation became critical in Kenya where the refugee population has soared from 15,000 at the end of 1990 to 340,000 in mid-1992. Most refugees in Kenya suffer from acute malnutrition. Camps were overcrowded, with deficient water supplies, and insecure where close to the border. Kenya itself was under a severe drought and hard pressed to meet its own food needs. 55/

Armed conflict has obstructed the delivery of food and medical and other supplies to refugee camps. 56/ Some armed groups have prevented the flow of relief supplies, fearing that they could feed opposing armies rather than refugees. In other instances, armed gangs have looted supplies as well as transport equipment. 57/ In March 1992, rival factions in Somalia agreed to a cease-fire. The United Nations Security Council approved sending a cease-fire monitoring force and, later on, a security force to facilitate the delivery of humanitarian assistance.

Other factors also contribute to the shortage of food, malnutrition and disease in refugee camps in Africa. 58/ Measles and dehydration caused by diarrhoea are common causes of death. Outbreaks of scurvy, pellagra, beri-beri and other deficiency diseases are common.

In Asia, there were some 7 million refugees, excluding 2.3 million Palestinian refugees. Five million of them were refugees from the war in Afghanistan. One third of the total population of Afghanistan were refugees, 2 million in the Islamic Republic of Iran and about 3 million in Pakistan. They are well integrated in the Islamic Republic of Iran, where only 3 per cent of them live in camps. They have settled in urban areas and have joined the local labour market. Since 1990, there has been some voluntary repatriation and about 200,000 refugees are estimated to have returned home. With the seeming cessation of hostilities in April 1992, it appeared likely that large numbers would return to Afghanistan. The travel back home can be unsafe. Sometimes, rebels confiscate returnees' means of transport, forcing them back to the country of asylum. There has also been pressure by some leaders to keep refugee populations in order to bolster their power over the camps. Finally, devastation in some areas of the country is extensive, preventing many from coming back. 59/ Fresh fighting in Kabul in August 1992 has reduced these prospects somewhat.

After signing the Comprehensive Political Settlement of the Cambodian Conflict, agreed upon in Paris in October 1991, a major repatriation exercise was organized for the 350,000 Cambodian refugees and displaced persons living in Thailand. The repatriation is to be carried out under the supervision of the Office of the United Nations High Commissioner for Refugees (UNHCR) to be completed in time for the elections in April 1993. The first convoys left

Thailand at the end of March 1992. However, the operation is beset with many problems and its completion may take longer than envisaged. Many parts of the Cambodian territory are mined and casualties and accidents run high: about 200 to 300 people were handicapped and another 200 to 300 people killed in mine explosions. A land-mine awareness programme was being implemented and some areas of the Cambodian territory were surveyed. There was a shortage of identified arable land on which the returnees could be settled. Access to water was another major constraint. 60/

As solutions were being found for some groups of refugees and displaced persons, new flows of refugees began in Myanmar and Iraq. Within a year, beginning March 1991, there were 191,000 refugees from Myanmar in Bangladesh. Conditions in the camps were deplorable as only 54 per cent of refugees had shelter. Clean water was in short supply and there was a high incidence of disease. 61/ The Persian Gulf conflict also created new flows of refugees and displaced persons. By the end of May 1991, the Iraqi refugee population reached 1.4 million in the Islamic Republic of Iran and 400,000 in Turkey, from 50,000 and 7,500, respectively, two months previously. Although many returned to Iraq, at the beginning of 1992 there were still 100,000 in the Islamic Republic of Iran, 35,000 in Saudi Arabia, 4,000 in the Syrian Arab Republic and 31,000 in Turkey. 62/

There was a sharp increase in the number of Vietnamese refugees, particularly of "boat people", after 1985. The number of Vietnamese refugees registered in UNHCR camps totalled 32,000 in 1986. In 1989, they amounted to more than 100,000. Most of them landed in Hong Kong. These new waves of refugees put the practice of asylum at near collapse; camp populations reached unprecedented levels and it was feared that these people were going to be pushed back out to sea. 63/ In June 1989, the International Conference on Indochinese Refugees adopted a Comprehensive Plan of Action, by which screening procedures were introduced in receiving countries in order to identify and separate genuine refugees who qualify for resettlement from economic migrants who were to be repatriated. Inflows of boat people fell off in 1990 and 1991. About 20 per cent of recently arrived people have been granted refugee status and are awaiting resettlement. There is still considerable controversy about the future of those who are considered economic migrants. In Hong Kong, for instance, non-refugees are accommodated in detention centres, while refugees go to open refugee centres, enjoy rights to employment and freedom of movement. Some forced repatriation from Hong Kong to Hanoi took place at the end of 1991. About 23,000 people who did not qualify as refugees had returned spontaneously to Viet Nam by the end of March 1992. Further, under the Orderly Departure Programme (ODP) in force, there were opportunities for those people who wished to emigrate from Viet Nam to do so legally and with prior arrangement. Some 65,000 people departed from Viet Nam under ODP in 1991, bringing the total under the Programme to 318,000. 64/

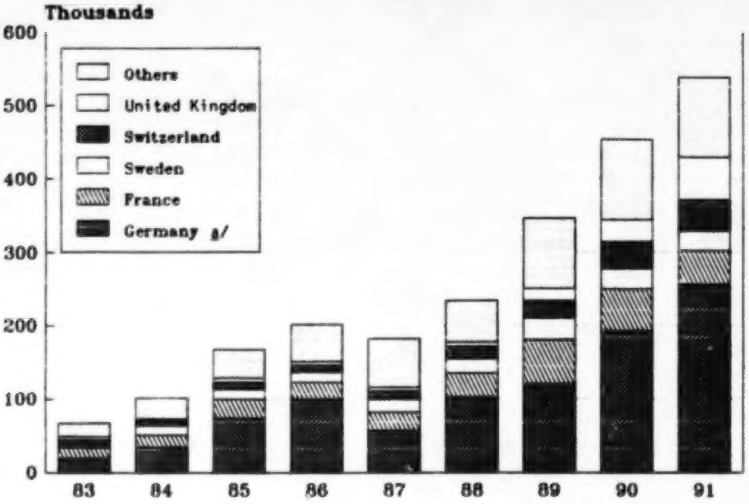
Trends in Latin America are more encouraging than those observed in Africa, Asia and Europe. A plan of action for voluntary repatriation of refugees and other displaced persons in Central America and for integration of those who opted for not returning to their home countries was set up by the International Conference on Central American Refugees, convened by Costa Rica, El Salvador, Guatemala, Honduras, Mexico and Nicaragua in 1988. The end of the civil war in Nicaragua and the elections there in March 1990 contributed to the decrease in the number of refugees in Central America. In 1990, UNHCR repatriated about 35,000 Nicaraguan refugees and 19,000 members of the Nicaraguan resistance. The repatriation of refugees continued in 1991, particularly those hosted by Costa Rica and Honduras. All refugee camps in those two countries are now closed. Refugees from El Salvador and Guatemala have also been returning home and, consequently, the refugee population in Honduras was reduced by 93 per cent from March 1990 to March 1991. With the end of the civil conflict in El Salvador in December 1991, the number of returnees may have increased even further in 1992. In South America, 2,500 Chileans voluntarily returned to their home country and the total number of refugees in the region has decreased. 65/ Mexico continues to host a large number of refugees and displaced persons. At the end of 1990, there were 51,000 refugees in Mexico, most of them Guatemalans. These successes in Central America were blighted by developments in Haiti in October 1991, with a new flow of refugees from Haiti, most of them heading for the United States. Some reached the Bahamas, Cuba and Jamaica. Others, with the assistance of UNHCR, were temporarily settled in Honduras, Suriname and Venezuela. From October 1991 to June 1992, some 37,000 Haitians reached the American naval base in Cuba. Approximately 30 per cent of them had their claims considered as legitimate and were allowed permanent asylum in the United States. The rest were repatriated. 66/

The number of asylum applications filed with the United States Immigration and Naturalization Service declined by almost 30 per cent, from 191,000 in 1989 to 135,000 in 1990. People from the former Soviet Union constituted the largest group, followed by Vietnamese. Some 97,000 were legally admitted to the country in 1990. During the period 1985-1990, a total of 554,000 people were accepted as refugees in the United States. 67/ The number of people seeking asylum in Canada has increased substantially; about 70 per cent of applicants are accepted as refugees.

Prior to the crisis in Yugoslavia, there were substantial increases in the number of applications for asylum in Europe. Asylum seekers in Europe averaged 120,000 annually during the period 1980-1985. Their numbers jumped to 325,000 per year during the period 1986-1991. During the first three years of the latter period, most applicants were nationals of developing countries, especially in West Asia, as a result of the war between the Islamic Republic of Iran and Iraq and the civil war in Lebanon. Other countries in which civil war or ethnic strife prevailed, including Sri Lanka, augmented the inflow. 68/ There was a jump from 230,000 in 1988 to 537,000 in 1991. That massive increase was mostly accounted for by asylum seekers from Eastern Europe. The increase, except from Yugoslavia and to a lesser extent Romania, was largely the result of a relaxation of travel restrictions subsequent to political changes in the countries of that region.

Germany has been the country of choice for a high proportion of asylum seekers (see figures I.8 and I.9). There were 256,000 applicants in 1991, compared to 20,000 in 1983. Forty-eight per cent of all asylum seekers in Europe did so in Germany in 1991, compared to 30 per cent in 1983. The increased inflow came from both Asia 69/ and Europe. Refugees of European origin rose from 5,000 in 1983 to 25,000 in 1987 and to 143,000 in 1991. The majority of them in 1991 were from Yugoslavia (75,000) and Romania (41,000). Poles no longer constitute the largest group of Eastern Europeans seeking asylum in Germany.

Figure I.8. Asylum applications received in European countries, 1983-1991



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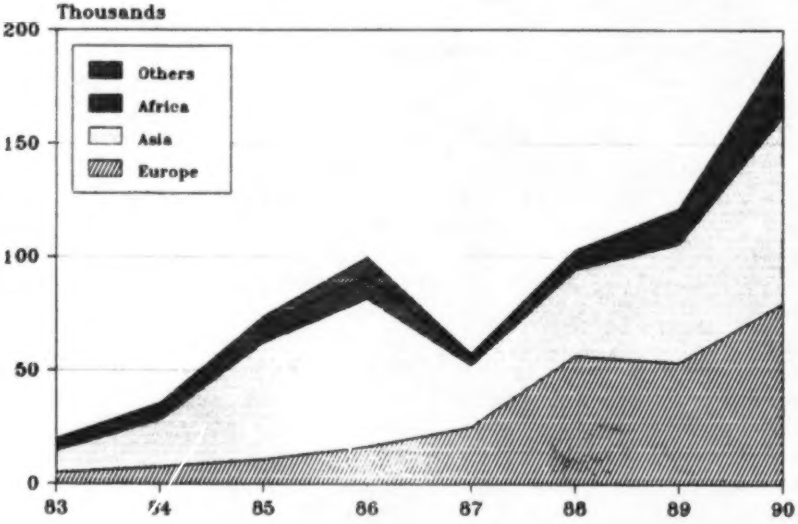
Sources: B. Hovy, "Asylum migration in Europe: patterns, determinants and the role of East-West movements", paper presented at the International Conference on Mass Migration in Europe: implications in East and West, Vienna, March 1992; Germany, Statischen Bundesamtes, Statistiches Jahrbuch 1991 (Wiesbaden, 1991).

a/ Refers to the former Federal Republic of Germany.

Figure I.9. Asylum requests filed in Germany by region of origin of applicant, 1983-1990



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Sources: See figure I.8.

Ethnic and religious conflicts in the former Yugoslavia have created the worst refugee crisis in Europe since the Second World War. Both the size of the problem and its nature evoke painful memories of that War. Processes of "ethnic cleansing" and detention camps for those persecuted reveal to some degree the barbarities in Europe during the 1930s and 1940s. In mid-1992, there were more than 2.3 million refugees, with about 1.8 million relocating themselves within the republics that formed the former Yugoslavia and 500,000 finding refuge abroad. Most fled to Germany (200,000), Hungary (60,000), Austria (50,000) and Sweden (44,000). This sudden exodus has tested the hosting capacity of receiving countries to the limits. Some countries are increasingly reluctant to accept more refugees in their territories, while others are increasing border controls. 70/

The potential for larger outflows of refugees from Eastern Europe and the former Soviet Union will remain strong for quite some time. As the old States are dismantled and new nation States are formed and claims for cultural homogeneity within each State are advanced, ethnic tolerance and cohabitation will come under severe strain. Their victims will escape as refugees. 71/

One of the questions of policy to which attention needs to be paid is the treatment of refugees who over a number of years have assimilated themselves in the host country, such as Afghan refugees in the Islamic Republic of Iran, Angolan refugees in Zambia and Liberian refugees in Côte d'Ivoire. They usually do not live in camps and do not receive assistance from Governments, intergovernmental organizations or non-governmental organizations. While their conditious are usually not as satisfactory as the conditions of those who had received such assistance, they were, in general, less likely to consider themselves "refugees" but as a part of the local citizenry, although the laws in force may not permit that. 72/ There is room both for assistance to those people who would benefit at less cost than those in camps and for reconsideration of the legal provisions concerning their rights in the host country.

## 2. Is the status of refugees under threat?

The world refugee population increased from 8.5 million in 1980 to 17 million in 1991. Even though some major problems that gave rise to refugee movements have been solved and there has been some repatriation of refugees, human rights violations and ethnic, religious and political conflicts persist in many parts of the world. Most of the refugees originate in developing countries and are given temporary asylum in other developing countries. The increase of refugee inflows creates additional difficulties for receiving developing countries, which usually lack resources to promote the well-being of their own populations. As shown earlier, the number of asylum seekers in developed countries, particularly in Europe, has risen sharply in recent years. Some of them originate in developing countries, while large numbers come from economies in transition. Although developed countries are better equipped than developing countries to deal with the inflows and the refugee populations they shelter are distinctly smaller than in developing countries, recent developments have been creating many problems for them and for potential refugees.

Administrative costs and those for providing social security to asylum seekers have soared as their number has increased. There has been a considerable build-up of unprocessed applications. The longer the period of waiting, the higher the costs become for asylum applicants to be provided housing, food and other services. Costs incurred by the major industrial countries in dealing with asylum seekers reached $7 billion to $8 billion in 1991. This amounts to about 14 per cent of their development aid to developing countries in 1990. 73/ The increase in the number of asylum seekers in Europe has coincided with persistent high unemployment and other economic and social difficulties in those countries, all of which contributed to the intensification of xenophobic sentiments within certain sectors of their population.

There is an increasing feeling in developed countries that the principle of political asylum is being abused. While recognizing the existence of situations that drive out refugees in many parts of the world, it is argued that some of the reasons for increased outflows are economic and give rise to "economic refugees". Many asylum seekers from developing countries are seen as migrants looking for better economic conditions rather than refugees with a well-founded fear of being persecuted. It is likely that restrictions on labour migration to many developed countries have contributed to the abuse of the refugee principle. Nationals of Eastern Europe and countries of the former Soviet Union have in the past enjoyed more generous treatment in developed countries because they were perceived to be fleeing totalitarianism. Until recently, their numbers were small as movement out of the region was tightly controlled, except on the occasion of political upheavals. 74/ With political and economic reform in those regions and the rise in the number of refugees, several countries have questioned the validity of claims for asylum by applicants from Eastern Europe and the former Soviet Union.

Since July 1991, those seeking asylum in France do not get a work permit. Other countries, fearing abuses of their refugee asylum practices, do not give people from specific countries access to their asylum screening process. This refers more specifically to nationals from Eastern European countries. France no longer recognizes citizens from Czechoslovakia, Hungary and Poland, which are well on their way to becoming market-based economies, as needing asylum. Likewise, Belgium has suspended the refugee status eligibility for Poles and Hungarians. 75/

Several countries have started to take measures to prevent people from reaching their territories. Visa requirements have been imposed on nationals from certain countries, fines have been imposed on airlines for bringing in passengers without proper documents and surveillance has increased at borders to prevent illegal crossing. In May 1992, the United States Coast Guard pushed boats full of potential Haitian refugees back to Haiti, preventing them from presenting their claims. While the aim is primarily to prevent potential migrants, the process does affect refugees in need of protection. There is also a trend to keep asylum seekers in the region of their origin, making it more difficult for them to reach potential countries of refuge in continents other than their own. 76/ It thus seems that the right to seek asylum is increasingly threatened by migratory pressures. The practice of imposing fines on airlines that bring in people without proper documents shifts the burden of considering claims for asylum to air carriers, which are unlikely to be in a position to do so. They are likely to exclude many with the right to seek protection in other countries. 77/

Most countries have also started to apply more strictly the definition of refugees contained in the 1951 Convention relating to the Status of Refugees. The Convention defines a refugee as any person who, "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country". 78/ Many people who have fled their countries of origin owing to massive disrespect for human rights or other man-made disasters may not be able to prove that they have a well-founded reason to fear that their individual lives were in jeopardy. The percentage of people whose claims have been considered genuine has declined recently in many countries. In Germany, the current rate of approval of total claims for refugee status is 7 per cent. In Switzerland, out of the 16,400 applications processed in 1990, 570 (3.5 per cent) were granted refugee status. 79/

Despite the low approval rate, few have been forceably repatriated. Many are allowed to stay on humanitarian grounds under a status not covered under the Convention. The number of applicants for asylum who have been permitted to stay on humanitarian grounds exceeds the number of people accepted as refugees under the 1951 Geneva Convention. Although this offers some minimum protection to refugees, it is unstable since Governments may withdraw permission to stay at any time. 80/

These new restrictions, which flow from the desire of countries to minimize immigration for economic reasons, jeopardize the position of bona fide asylum seekers in two ways: access to certain countries has become more difficult for them, and once in a country, access to full protection under the law has become more remote. Preventing the abuse of refugee status while regulating the flow of migrants for other reasons is an urgent challenge for the international community.

## Notes

1/ Levels and Trends of Contraceptive Use as Assessed in 1988 (United Nations publication, Sales No. E.89.XIII.4).

2/ B. Herz and A. R. Measham, "The save motherhood initiative: proposal for action", World Bank Discussion Papers, No. 9 (Washington, D.C., World Bank, 1987).

3/ Napaporn Havanon, John Knodal and Werasit Sittitnal, "Family size and family well-being in Thailand", Population Studies Centre Research Report No. 90-191 (Ann Arbor, University of Michigan, August 1990).

4/ World Population Monitoring 1991, Population Studies No. 126 (United Nations publication, Sales No. E.92.XIII.2), p. 20.

## Notes (continued)

5/ Defined as the combination of a city's urban core, the surrounding built-up area that is economically oriented to that core, without regard to administrative municipal boundaries.

6/ Population Growth and Policies in Mega-Cities: Mexico City (United Nations publication, Sales No. E.91.XIII.3).

7/ Dhira Phantumvanit and Wanai Liengcharernsit, "Coming to terms with Bangkok's environment problems", Environment and Urbanization, vol. 1, No. 1 (April 1989), pp. 31-39.

8/ United Nations Population Fund, Population, Resources and the Environment: The Critical Challenges (New York, 1991), p. 61.

9/ N. Sadik, The State of World Population 1990 (New York, United Nations Population Fund, 1990); and J. Hardoy and D. Satterthwaite, Squatter Citizen: Life in the Urban Third World (London, Earthscan Publications, Ltd., 1989).

10/ United Nations Centre for Human Settlements (Habitat), "Urbanization and sustained development in the third world: an unrecognized global issue" (Nairobi, 1989), p. 39.

11/ Population Growth and Policies in Mega-Cities: Mexico City ...

12/ Peter M. Ward, "Mexico City", paper prepared for the Megacities of the Americas Conference, State University of New York at Albany, 5-7 April 1990.

13/ Leon Hoa, "Rural industrialization and stress on small towns: China's unchanged policy", Third World Planning Review, vol. 6, No. 1 (1984), pp. 27-36.

14/ Xiao Li, "Cities hit big time with urban expansion", China Daily, 30 October 1991.

15/ See International Labour Organisation, African Employment Report, 1988 (Addis Ababa, 1989).

16/ V. Jamal and J. Weeks, "The vanishing rural-urban gap in sub-Saharan Africa", International Labour Review, vol. 123, No. 3 (Geneva, International Labour Organisation, 1983).

17/ See report of the Secretary-General on international cooperation for the eradication of poverty in developing countries (A/46/454).

18/ See Oded Stark and J. Edward Taylor, "Migration incentives, migration types: the role of relative deprivation", The Economic Journal, No. 101 (September 1991), pp. 1163-1178.

## Notes (continued)

19/ Within the countries considered here, France is the exception in the period 1980-1985. International migration inflows actually increased in 1981 and 1982 owing to the regularizations of illegal immigrants that took place during the period.

20/ The number of Poles entering Germany on the basis of German ancestry was 250,300 in 1989, 113,300 in 1990 and 40,100 in 1991 (see table I.8).

21/ It is not clear whether these figures are included in the total of immigrants admitted to Germany during those years.

22/ During the period 1985-1989, about 70 per cent of the immigrants admitted to the United States were family members either of American citizens or of permanent residents. See World Population Monitoring 1991 ..., pp. 173-174.

23/ Financial Times, 26 September 1991.

24/ An exception to this restriction was introduced with the adoption at the end of 1989 of a new Immigration Control Act, by which descendants of Japanese immigrants to South America could apply for long-term residence in Japan and participate in economic activities.

25/ The Economist, 2 June 1990.

26/ World Population Monitoring 1989 (United Nations publication, Sales No. E.89.XIII.12), p. 219.

27/ R. Davies, "Key issues in reconstructing south-southern African economic relations after apartheid", Southern African Perspectives, Working Paper No. 2 (Capetown, University of the Western Cape/Centre for Southern African Studies, November 1990).

28/ World Population Monitoring 1991 ..., p. 181.

29/ See note by the Secretariat on the economic, social and environmental consequences of the situation between Iraq and Kuwait and its short-, medium- and long-term implications (E/1991/102).

30/ World Economic Survey, 1992 (United Nations publication, Sales No. E.92.II.C.1 and corrigenda), p. 41.

31/ Economic and Social Commission for Western Asia, "The return of Jordanians/Palestinians from Kuwait: economic and social implications for Jordan" (September 1991).

32/ Overseas Development Institute, "Economic crisis in the Arab world", briefing paper (March 1992), p. 3.

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33/ As defined by the International Monetary Fund, labour income in the balance of payments is the factor income accruing to temporary labourers, i.e., those staying less than 12 months abroad; workers' remittances refer to those transfers made by workers living more than one year in a foreign country; and migrant transfers are those flows of goods and changes in financial assets that arise from international migration. Most countries, however, do not distinguish among these types of flows. See Supplement to the World Economic Survey, 1983 (United Nations publication, Sales No. E.83.II.C.3), pp. 31-41.

34/ The benefits from international migration accruing to sending countries are not restricted to the larger foreign exchange earnings. See 1989 Report on the World Social Situation (United Nations publication, Sales No. E.89.IV.1), pp. 87-93.

35/ S. Wahba, "What determines workers' remittances?", Finance and Development (December 1991), pp. 41-44.

36/ A. Lebon, "Ressortissants communautaires et etrangers originaires des pays tiers dans l'Europe des douze", Revue europeenne des migrations internationales, vol. 6, No. 1 (1990), pp. 185-202.

37/ In France, for instance, there was strong resistance against Italian, Spanish and Polish immigrants reaching the country in the 1930s as well as against Belgians and Swiss who settled there at the end of the nineteenth century. Threats to the national identity were constantly mentioned and expulsion was demanded. For details, see P. Videlier, "Alerte: immigres!", Le monde diplomatique (September 1991), p. 15.

38/ Support for right-wing parties that have an explicit anti-migration platform has recently increased in Austria, France, Germany and Switzerland. The same trends were observed during the economic recession of the early 1980s and other periods of economic crisis.

39/ P. Gans, "Changes in the structure of the foreign population of West Germany since 1980", Migration, No. 7 (1990), pp. 25-50.

40/ P. Muus, "Employment and vocational training", paper presented at the International Conference on Migration, Rome, 13-15 March 1991 (Paris, Organisation for Economic Cooperation and Development).

41/ During the period 1981-1988, 570,000 Mexicans were legally admitted in the United States.

42/ P. Muus, op. cit., p. 7.

43/ U. Meherlander, "Sociological aspects of migration policy: the case of the Federal Republic of Germany", International Migration, vol. XXV, No. 1 (March 1987), pp. 87-96.

44/ Julian L. Simon, The Economic Consequences of Immigration (Oxford, Basil Blackwell, 1989), appendix A.

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45/ It has been argued that foreign professionals, managers and highly skilled artisans are more easily incorporated into and accepted by the local society. Working class immigrants, on the other hand, face a less privileged context of reception. See A. Portes and J. Borocz, "Contemporary migration: theoretical perspectives on its determinants and modes of incorporation", International Migration Review, vol. XXIII, No. 3 (autumn 1989), pp. 606-630.

46/ D. Maillat, "Long-term aspects of international migration flows: the experience of European receiving countries", in The Future of Migration (Paris, Organisation for Economic Cooperation and Development, 1987), pp. 38-63.

47/ S. Castels, "La politica sull'immigrazione in Australia", in Quadro delle politiche immigratorie nei paesi europei, in USA, Canada e Australia (Turin, Fondazione Giovanni Agnelli, 1989).

48/ L. Koch, "Impact of the reversal of the migration situation on the social structures of certain countries: the case of Italy", International Migration Review, vol. XXVII, No. 2 (June 1989), pp. 191-202.

49/ A. Portes, and J. Borocz, op. cit., pp. 611-614.

50/ General Assembly resolution 45/158, annex.

51/ Of the 140,000 Ethiopian refugees who reached Djibouti in early 1991, 125,000 returned to their home country by mid-June 1991. Additionally, many of the Ethiopian refugees in Somalia voluntarily returned to their home country during 1991 owing to the deterioration of the security situation in that country (see report of the Secretary-General on humanitarian assistance to refugees and displaced persons in Djibouti (A/46/428) and report of the United Nations High Commissioner for Refugees (E/1992/59)).

52/ See report of the Secretary-General on emergency humanitarian assistance to Liberian refugees and displaced persons (A/46/432).

53/ H. A. Ruiz, "Liberia: the honeymoon is over", Refugees, No. 88 (January 1992), pp. 30-34.

54/ See report of the Secretary-General on assistance to refugees and displaced persons in Malawi (A/46/433).

55/ UNHCR, Information Bulletin on Kenya, 16 March 1992; and "Update on refugee developments in Africa: alarming death rate among new refugees from drought-stricken areas", 24 April 1992.

56/ See the Declaration, Framework of Cooperation and Programme of Action adopted at the Summit of the Heads of State and Government of the Countries of the Horn of Africa, held at Addis Ababa on 8 and 9 April 1992 (A/47/182), annex.

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57/ See, for example, report of the Secretary-General on the situation in Somalia (S/23829/Add.1), para. 32.

58/ See Administrative Committee on Coordination Subcommittee on Nutrition, "Refugees' nutrition crisis", SCN News, No. 7 (mid-1991), pp. 1-6.

59/ UNHCR, "Going home", Refugees, No. 88 (January 1992), pp. 6-11; and "A grave threat to peace", Refugees, No. 81 (December 1990), pp. 18-20.

60/ UNHCR, Information Bulletin No. 4 on Cambodia Repatriation Operation, 14 April 1992; "De-mining", Refugees, No. 88 (January 1992), pp. 12-15; and B. Hovy, "Southeast Asian refugees: tide set to turn?", Population, vol. 17, No. 12 (December 1991), p. 2.

61/ UNHCR, Information Bulletin on Bangladesh, 7 April 1992.

62/ UNHCR, Information Bulletin No. 8 on Operations in the Persian Gulf Region, 27 January 1992.

63/ "Southeast Asia: taking steps in the right direction", Refugees, No. 81 (December 1990), pp. 22-24.

64/ See report of the United Nations High Commissioner for Refugees (E/1992/59).

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66/ The New York Times, 2 July 1992, p. A9.

67/ United States, Immigration and Naturalization Service, 1990 Statistical Yearbook of the Immigration and Naturalization Service (Washington, D.C., 1991).

68/ G. Loescher, "The European Committee and refugees", International Affairs, vol. 65, No. 4 (1989), pp. 617-636.

69/ Increases of asylum applications from Asia during 1989 and 1990 were mainly filed by nationals from Afghanistan, India, Lebanon, Turkey and Viet Nam (Statistiches Budensamt, Statistiches Jahrbuch 1991 (Wiesbaden, 1991)).

70/ The New York Times, 24 July 1992, p. A1 and 21 July 1992, p. A6.

71/ The process of state formation within the former Soviet Union, for instance, may result in further refugee movements, particularly of Russian minorities living outside Russia. J. Blaschke, "East-West migration in Europe and international aid as a means to reduce the need for emigration", Joint ILO-UNHCR Meeting on International Aid as a Means to Reduce the Need for Emigration, Geneva, May 1992.

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72/ Art Hansen, "Refugee self-settlement versus settlement on government schemes", Discussion Paper No. 17 (Geneva, United Nations Research Institute for Social Development, November 1990).

73/ Financial Times, 4 March 1992.

74/ For instance, Hungary in 1956 and Czechoslovakia in 1968. Economic Commission for Europe, Economic Survey of Europe in 1991-1992 (United Nations publication, Sales No. E.92.II.E.1), chap. 7, pp. 259-262.

75/ B. Hovy, "Asylum migration in Europe: patterns, determinants and the role of East-West movements", paper presented at the International Conference on Mass Migration in Europe: Implications in East and West, Vienna, March 1992.

76/ "Continuity and change", Refugees, No. 81 (December 1990), pp. 27-29.

77/ P. Kessler, "Jet set refugees", Refugees, No. 88 (January 1992), pp. 35-37.

78/ United Nations, Treaty Series, vol. 189 (1954), No. 2545, p. 152.

79/ UNHCR, "UNHCR activities financed by voluntary funds: Report for 1990-91 and proposed programmes and budget for 1992" (A/AC.96/774), part III.

80/ According to one author, in 1987, Germany granted Convention status to only 2 per cent of asylum applicants, while almost 70 per cent received de facto refugee status. In Norway, 80 per cent were given de facto refugee status, while only 2 per cent received Convention status. See G. Loescher, op. cit., p. 625.

## Chapter II

## HUNGER, MALNUTRITION AND FOOD SUPPLIES

In 1975, the World Food Council, established by the General Assembly in 1974, set a target for ending world hunger within two decades. In 1992, the Council estimated that in 1990 there were 550 million hungry people in the world. 1/ Clearly, the target is far from being met. The number of hungry approaches 1 billion if account is taken of the people vulnerable to periods of hunger each year. 2/

Recent initiatives such as the "green revolution", large investments in agricultural infrastructure and extension services, and improvements in markets, ensure a global output of food adequate to meet nutritional needs. However, these initiatives have had uneven results. The nutritional situation has shown signs of improvement in Asia, long-term deterioration in Africa, and stagnation or some worsening in Latin America. 3/ In the economies in transition, the collapse of economic institutions has reduced output during the past few years.

Famine and hunger are caused primarily by a lack of purchasing power on the part of either individuals and families wanting to buy food or of entire countries wanting to import food they do not produce.

A lack of purchasing power is characteristic of poverty (see chap. VII). The poor have neither an adequate income nor assets that can be exchanged or sold. Food distribution within poor families often denies adequate supplies to the weaker members - women and children. In many countries, inefficient distribution systems raise the price of food beyond the capacity of the poor to feed themselves.

Man-made and natural disasters also create conditions of famine and hunger. In 1991 there were 40 million people around the world to whom emergency food aid was the only lifeline. 4/ Natural disasters destroyed crops, infrastructure, and opportunities for employment. The absence of infrastructure for flood control, irrigation and transport and the incapacity of Governments to provide urgent assistance exacerbated the destruction caused by natural disasters. Man-made disasters, mainly in the form of civil war and other internal conflicts, destroyed both crops and employment opportunities and obstructed the flow of food supplies. Violence and villainy in such countries as Somalia and the former Yugoslavia also kept food from the hungry.

Hunger and starvation leave millions of people in developing countries with debilitating problems of undernutrition (lack of enough food energy for an active and productive life), malnutrition (inadequate or inappropriate intake of any nutrient) and micronutrient deficiencies, especially of iron, iodine and vitamin A. Stunting and wasting in children and infants born underweight are the common consequences. In developed countries, malnutrition is essentially the consumption of inappropriately high quantities of certain nutrients.

## A. Incidence of hunger and malnutrition

In 1990, of the world's estimated 550 million hungry people, about 300 million, or almost 60 per cent, lived in Asia; about 30 per cent lived in Africa and about 10 per cent in West Asia, Latin America and the Caribbean. The largest increase in the number of chronically hungry people during the 1980s was in Africa, a result of high population growth, poor economic performance and man-made and natural disasters. The situation also deteriorated in Latin America and the Caribbean; 5/ it improved in East and South Asia. The Persian Gulf war and sanctions on international trade with Iraq created very difficult situations with regard to food supplies there and reduced the incomes available for people to acquire food. 6/

The prognosis for the short term is not promising. The number of hungry people is projected to increase in sub-Saharan Africa to 165 million. The largest concentration of the hungry will continue to be in Asia, mainly in South Asia, and overwhelmingly in rural areas. 7/ In Latin America and the Caribbean, the share of the population remaining poor will remain stable, and the absolute number will rise to 296 million. 8/

Dietary energy supply, or the supply of calories, in 1987-1989 in developing countries was 72 per cent of that in developed countries, having risen 2 percentage points since in 1979-1981 (see table II.1).

Towards the end of the 1980s, in 38 out of 103 developing countries the average person was deficient in daily per capita dietary energy supply. The distribution of the deficiency, by country, is shown in table II.2. The 38 included Bangladesh, Burundi, Haiti, Mozambique, Somalia, Sudan, Uganda and Zaire, which were affected by natural and man-made disasters, and India, Nigeria and Pakistan which had large populations.

The national aggregate figures mask wide variations in daily per capita intake within the same country. For instance, in China, undernutrition is reported to prevail in the western and central provinces (Gansu, Guizhou, Ningxia and Qinghai) and in minority autonomous regions. In Thailand, there were pockets of undernutrition in some rural areas, especially in the north-east and in urban slums. In the Philippines, undernutrition among children was worst in rural areas, especially among children of tenant farmers and agricultural labourers. Many children in urban areas also suffered from malnutrition. 9/ In Indonesia, undernutrition among children under five years was more prevalent in rural areas than in urban areas and more severe in some provinces, such as south-east Sulawesi, East Timor, West Kalimantan and Nusa Tenggara. In Sri Lanka, pregnant women were especially vulnerable to undernutrition. In India, hunger and malnutrition were most heavily concentrated in the poorest regions in the eastern and central states. Undernutrition was worse among women than among men and more common in northern than in southern India.

Table II.1. Average daily per capita supply of calories, protein, iron and vitamin A, 1969-1971, 1979-1981 and 1987-1989

| | Calories (Number) | | | Protein (Grams) | | | Iron (Milligrams) | | | Vitamin A (Micrograms) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1969-1971 | 1979-1981 | 1987-1989 | 1969-1971 | 1979-1981 | 1987-1989 | 1969-1971 | 1979-1981 | 1987-1989 | 1969-1971 | 1979-1981 | 1987-1989 |
| World | 2 431 | 2 599 | 2 703 | 64.5 | 67.5 | 70.4 | 14.1 | 14.2 | 14.2 | 742 | 779 | 847 |
| Developing countries | 2 103 | 2 333 | 2 474 | 54.1 | 57.2 | 59.9 | 13.7 | 13.8 | 13.8 | 576 | 618 | 685 |
| Developed countries | 3 224 | 3 326 | 3 415 | 95.2 | 98.9 | 103.0 | 15.1 | 15.4 | 15.4 | 1 143 | 1 127 | 1 351 |
| North America | 3 359 | 3 464 | 3 656 | 102.3 | 101.9 | 108.7 | 12.3 | 13.1 | 14.5 | 1 360 | 1 445 | 1 592 |
| Europe | 3 244 | 3 392 | 3 459 | 92.3 | 99.5 | 102.0 | 15.8 | 16.5 | 16.4 | 1 244 | 1 275 | 1 423 |
| Economies in transition | 3 332 | 3 405 | .. | 97.3 | 100.6 | .. | 16.3 | 16.4 | .. | 1 004 | 1 111 | .. |
| Percentage: developing/ developed countries | 65 | 70 | 72 | 54 | 57 | 58 | 91 | 90 | 90 | 50 | 55 | 51 |

Source: United Nations, Department of Economic and Social Development, based on FAO, The State of Food and Agriculture, 1984 (Rome, 1984), and Production Yearbook, vol. 40 (1986) and vol. 44 (1990).

Table II.2. Degree of deficiency in daily per capita dietary energy supplies in developing countries, 1987-1989

| Under 5 per cent | 5-10 per cent | 11-20 per cent | Over 20 per cent |
|---|---|---|---|
| Benin | Cameroon | Burundi | Mozambique |
| Burkina Faso | Guinea | Central African Republic | |
| Ghana | Kenya | Comoros | |
| Madagascar | Malawi | Rwanda | |
| Niger | Mali | Sierra Leone | |
| Nigeria | Togo | Somalia | |
| Zimbabwe | Uganda | Sudan | |
| Honduras | United Republic of Tanzania | Zambia | |
| India | Zaire | Bolivia | |
| Macau | Antigua and Barbuda | Haiti | |
| Vanuatu | Peru | Solomon Islands | |
| | Bangladesh | | |
| | Nepal | | |
| | Pakistan | | |
| | Samoa | | |

Source: United Nations, Department of Economic and Social Development, based on FAO, The State of Food and Agriculture, 1984 (Rome, 1984), and Production Yearbook, vol. 44 (1990).

Note: Degree of deficiency is based on requirements established by FAO and WHO.

In Latin America and the Caribbean, earlier improvements in nutritional status were reversed in some countries during the 1980s. Only Colombia, Costa Rica and Cuba were able to reduce poverty and hunger.

Hunger and its concomitant result, undernutrition, are widespread in Africa: of about 550 million people there, it is estimated that some 200 million are hungry and vulnerable to hunger. The incidence of hunger is more severe in rural areas and among children and women. Undernutrition among rural children is highest in southern Egypt. In Ghana, undernutrition affects more than one third of all young children; the problem is worse in the northern and central regions. The prevalence of hunger and undernutrition increased throughout the continent during the 1980s.

## B. Landlessness, natural disasters and civil war

Rural households without access to adequate land or employment opportunities ran a high risk of being hungry and undernourished. In India in 1990, there were some 60 million households with land of less than one hectare - inadequate to support a family. 10/ Landless rural families whose members worked at casual labour received wages too low to ensure food security. In Brazil in 1990, some 6 million people (14 per cent of the rural population) were landless agricultural labourers.

As part of stabilization and structural adjustment programmes in many developing countries, the workforce in government employment and in state enterprises was often reduced. Trade liberalization reduced employment in import-competing sectors. Devaluation, which helps raise the demand for exports, frequently failed to do so, except after a long delay. Social security safety nets were woefully inadequate to support the incomes of affected workers. Dismissed workers and their households became vulnerable to hunger. In addition, reduced public spending to cut budget deficits eliminated food subsidies.

Natural disasters in developing countries destroyed agricultural crops and infrastructure, disrupted food distribution and caused the death of livestock. They took the form of drought in China (1988 and 1989), Thailand (1990), Viet Nam (1987 and 1988), El Salvador (1989), Honduras (mid-1980s), Angola (1989/90), Ethiopia (1989-1991), Somalia, Sudan, the Sahel region of West Africa (mid-1980s) and southern Africa (1991/92); floods in Afghanistan (south-west, 1987), Bangladesh (1991), China (1988/89), Jamaica (hurricane, 1988), Angola (north, mid-1989), Ghana (north and north-east, 1987/88), the United Republic of Tanzania (north and east, 1989/90); earthquakes in Afghanistan (north-east, 1991) and El Salvador (late 1980s); volcano eruptions in the Philippines (1990); pests in Viet Nam and locusts and grasshopper infestation in the Sahel (mid-1980s). In Bangladesh, torrential storms were reported to have killed over 100,000 people and left about 300,000 people without food, clean water and shelter. In Jamaica, a hurricane damaged export and food crops and livestock. More than a quarter of the country's population was adversely affected. 11/ The international community made available to most of these countries emergency food aid and other supplies in order to forestall starvation and further deaths.

Refugees displaced by civil war and other conflicts also faced hunger, starvation and famine (see chap. I).

## C. Undernourished children

The visible signs of protein-energy malnutrition or protein-calorie malnutrition among children are stunting (below-normal height for a given age), wasting (below-normal weight for a given height) and being underweight (below-normal weight for a given age, a measure usually used for children under five years). Malnutrition intensifies the duration and severity of such diseases as diarrhoea and measles.

As table II.3 indicates, underweight children are serious problems in most developing countries. 12/ The total number rose from 167 million in 1980 to 188 million in 1990. The largest increases were in sub-Saharan Africa and in South Asia. The largest majority (78 per cent) live in Asia. The proportion of underweight children to all children increased in sub-Saharan Africa.

Table II.3. Underweight children a/ in developing countries, 1980, 1985 and 1990

| Region | 1980 | | 1990 | |
|---|---|---|---|---|
| | Millions | Percentage | Millions | Percentage |
| Sub-Saharan Africa | 21.0 | 29.1 | 30.2 | 30.8 |
| Near East/North Africa | 5.0 | 17.2 | 4.8 | 13.3 |
| South Asia | 89.9 | 63.6 | 101.1 | 58.6 |
| South-East Asia | 23.4 | 42.8 | 22.4 | 37.7 |
| China | 20.4 | 23.8 | 23.6 | 21.0 |
| Central America and Caribbean | 3.1 | 17.7 | 3.0 | 15.3 |
| South America | 4.4 | 13.2 | 3.0 | 8.2 |
| Developing countries | 167.0 | 38.1 | 188.0 | 34.8 |

Source: World Food Council, The Global State of Hunger and Malnutrition. 1992 Report (New York, 1992), table 2, p. 8.

a/ Under the age of 5 years.

In the Philippines, the prevalence of stunted or underweight children was worst in rural areas, among children of tenant farmers and agricultural labourers. In Indonesia, half of all children under five years were underweight in 1986; the condition was more prevalent in rural areas. Fourteen per cent of babies born in Indonesia had low birthweight. In Sri Lanka, in 1987, 38 per cent of children 3-36 months of age were underweight; 13 per cent of them suffered from wasting, and nearly 28 per cent were stunted. 13/

In Pakistan between 1985 and 1987, 52 per cent of children under five years were underweight. About 15 per cent showed signs of wasting, and 46 per cent showed signs of stunting. The poor were more disadvantaged.

In the Sudan, stunting, wasting and low birthweight are rife among children and infants. Sixty three per cent of two-to-five-year-old children are stunted. In 1987, 13 per cent of the young children in northern Sudan were wasted, and the incidence of low birth weight babies was 15 per cent. In Egypt, in 1988, about 30 per cent of the children 3-36 months old were stunted. In rural areas, 35 per cent of the children were stunted, rising to a high of 39 per cent in the rural south; in urban areas one quarter of the young children were stunted. In Morocco, between 30 and 61 per cent of the children under five years in rural areas were stunted, against the national average of about 25 per cent. In Ghana, almost 1 million children under 5 years (about 40 per cent of the age group) were underweight for their age and 30 per cent of the children were stunted. In Nigeria, at least 20 per cent of the children under five suffered from wasting. In south-eastern Nigeria, in 1985, malnutrition was highest among four-to-six-year-old children. In Kenya, the incidence of stunting, wasting and underweight was twice as high in rural areas as in the nation as a whole. In the United Republic of Tanzania, in 1988, 48 per cent of the children under five were moderately underweight, with 17 per cent of the one-year olds severely wasted. In Angola, 45 per cent of the children were malnourished. In Zimbabwe, in 1987, 17 per cent of all children aged 12-59 months had low weight for their age.

In Peru, in the mid-1980s, almost 40 per cent of all children under five years of age were stunted. In Ecuador, in 1988, 55 per cent of all children under five years of age were at least moderately underweight for their age; a third were stunted. In Brazil, 31 per cent of the children under five years of age suffer from malnutrition. In El Salvador, malnutrition was a major concern. It is estimated that 44 per cent of the children under five were underweight and nearly a fifth stunted.

In Honduras, in 1987, 20 per cent of the infants were born with low birthweight. In Mexico, about one third of the children under five years of age suffered from malnutrition. In Jamaica, in 1989, 9 per cent of children were underweight and 7 per cent stunted.

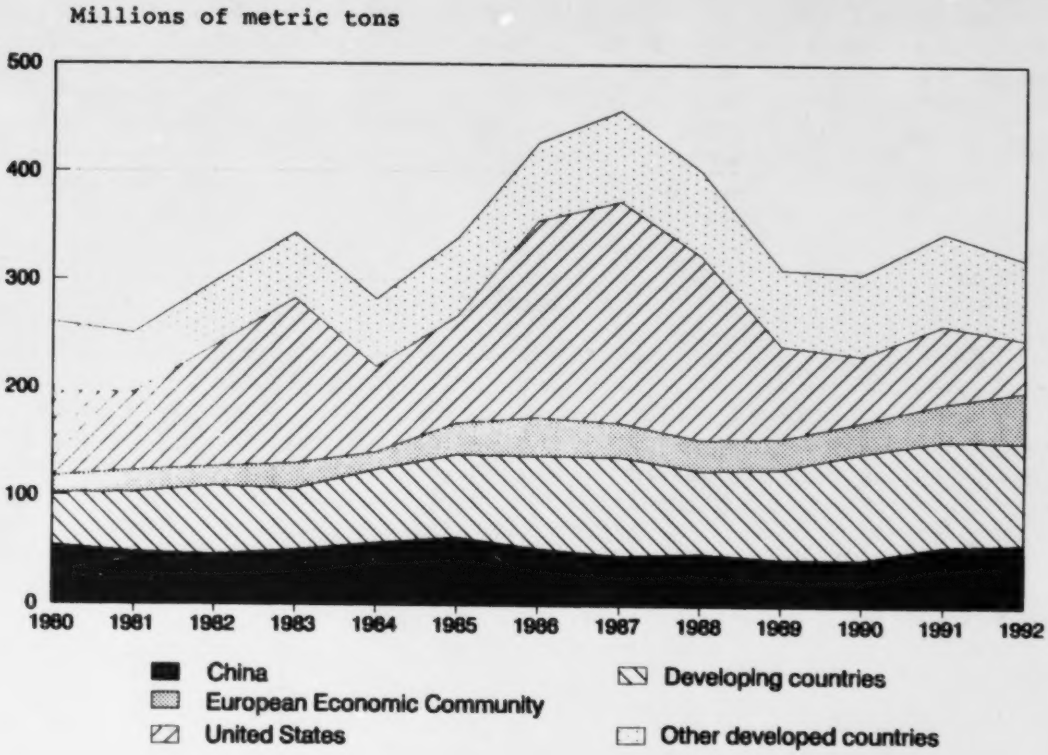
In the Dominican Republic, in 1986, 13 per cent of the children under three years of age were underweight and 21 per cent were stunted. Poverty and hunger were widespread in Haiti. Malnutrition was a serious problem: it is estimated that one child dies about every five minutes from dehydration, diarrhoea or another nutritionally related problem.

Cuba showed marked improvements in health care and the nutritional status of the population. The malnutrition problem there is similar to that in the developed countries: excessive intake of certain nutrients, especially fat, rather than a deficiency in nutrients. By the late 1980s, less than 10 per cent of the infants were born with low birthweight; youth were more likely to be obese than underweight. While only 4 per cent of primary school children were undernourished, about 24 per cent were obese; and at the secondary school level, about 6 per cent were undernourished, and 16 per cent were obese. The children most vulnerable to undernutrition were those who did not live with their mothers or who were members of families that had recently migrated from rural to urban areas.

## D. Cereal stocks

The world carry-over stocks of cereals at the end of the 1992 crop year are estimated at 316 million tons (see fig. II.1). The ratio of global cereal stocks to trend consumption would be 18 per cent, about the minimum necessary to safeguard world food security. The draw-down of cereal stocks in 1992 would occur mostly in the United States and in the former Soviet Union, more than counter-balancing substantial build-up of wheat stocks in the EEC. The aggregate cereal stocks of developing countries are forecast to change little in 1993. Wheat stocks in the former Soviet Union are expected to fall. At present, the global food supply situation in 1992/93 is tight, and international cereal prices are likely to remain strong.

Figure II.1. World stock of cereals, 1980-1992



Source: United Nations, Department of Economic and Social Development; Food and Agriculture Organization of the United Nations.

## E. Food aid

Global food aid relief activities increased dramatically in the early 1990s. The volume of global food aid deliveries rose slightly in 1991, to 14.3 million tons. Deliveries to eastern European countries fell sharply while those to sub-Saharan Africa increased considerably, to meet the needs of refugees, displaced people and drought victims.

In 1991 sub-Saharan Africa received 70 per cent of global relief food aid in cereals and 72 per cent in non-cereals. In all, the total deliveries of aid to the low-income, food-deficit countries and to the least developed countries increased over the levels of the two previous years.

Other countries that received large food aid deliveries in 1991 were Egypt, Jordan, Morocco and Tunisia, following the displacement of nationals working in Iraq and Kuwait as a result of the Persian Gulf war; Bangladesh, India, Pakistan and Sri Lanka in Asia; El Salvador, Guatemala, Jamaica and Peru in Latin America and the Caribbean.

Food aid deliveries to economies in transition amounted to 2.4 million tons in 1990 (mainly to Poland and Romania) and declined to about 1.2 million tons in 1991 (mainly to Albania, Bulgaria and the former Soviet Union).

Almost half of all the food shipped by the World Food Programme (WFP) was for relief activities. Further, about 70 per cent of the food handled by WFP 14/ on behalf of bilateral donors was for relief purposes.

## F. Micronutrient deficiencies and nutritionally related diseases

Vitamin-A deficiency and the disorders associated with it - xerophthalmia and nutritional blindness - are endemic in large parts of Africa, Asia, Latin America and the Caribbean (see table II.4). World wide, at least 190 million pre-school children are at risk of vitamin-A deficiency; 14 million of them experience some degree of xerophthalmia; each year, some 700,000 new cases of severe vitamin-A deficiency (measured as eye damage) occur, with approximately 350,000 victims going blind; 60 per cent of them die shortly after losing their sight. 15/ With school-age children and women of child-bearing age, the estimate swells to about 800 million. A majority of vitamin-A deficient populations are in 37 countries, of which 18 are in Africa. 16/

Iodine deficiency has a deleterious effect on the growth and development of children and can cause goitre. It is the commonest cause of preventable mental retardation. In severe cases it causes cretinism, deaf-mutism and squint. Iodine deficiency is usually found in mountainous regions and flood-prone areas where the soil lacks iodine and also in regions where little seafood is eaten. Globally, some 1,000 million people are at risk of iodine deficiency; about 225 million of them have goitre, and nearly 6 million suffer from overt cretinism. The problem is most serious in Asia, with South and East Asia being particularly affected. 17/

Iron-deficiency, or anaemia, is a common nutritionally related disease affecting at least 800 million people world wide.

Table II.4. Populations at risk of and affected by micronutrient malnutrition, 1991

(Millions)

| | Iodine deficiency | | Vitamin-A deficiency (xerophthalmia) | | Iron-deficiency (anaemia) |
|---|---|---|---|---|---|
| | At risk | Affected | At risk | Affected | |
| Africa | 150 | 39 | 18 | 1.3 | 206 |
| Americas | 55 | 30 | 2 | 0.1 | 94 |
| South-East Asia | 280 | 100 | 138 | 10.0 | 616 |
| Europe | 82 | 14 | -- | -- | 27 |
| Eastern Mediterranean | 33 | 12 | 13 | 1.0 | 149 |
| Western Pacific | 405 | 30 | 19 | 1.4 | 1 058 |
| World | 1 005 | 225 | 190 | 13.8 | 2 150 |

Source: World Health Organization "National Strategies for overcoming micronutrient malnutrition" (EB89/27), table 1.

At both the national and international levels, measures have been taken for some time to combat micronutrient deficiency diseases. They include dietary diversification, food fortification and supplementation and public health measures. People have been advised to increase their intake of local foods containing vitamin A, iodine and iron - for example, green leafy vegetables, orange-coloured vegetables and fruits, pulses and seafood. 18/ To reduce vitamin-A deficiency, vitamin-A capsules have been distributed to the public. Promising results were reported in many countries, including Brazil, India, Indonesia and the United Republic of Tanzania.

Iodine deficiency is being controlled by iodizing salt and by the injection of iodized oil. Good results have been realized in many countries, including China, Ecuador, Indonesia, Nepal and Zaire.

Many developing countries began to treat anaemia during pregnancy as part of prenatal care. Haemoglobin assessment and the provision of iron and folate tablets to all pregnant women have become standard procedures whenever prenatal care is provided at maternal and child health clinics.

At the international level, efforts were redoubled to fight micronutrient deficiency diseases. Seven multilateral and bilateral agencies 19/ cosponsored the Policy Conference on Micronutrient Malnutrition (Montreal, October 1991). They focused public attention on the need to eliminate these diseases by the year 2000. The World Bank, UNDP and the Canadian International Development Agency (CIDA) set up a Micronutrients Secretariat within Canada's International Development Research Centre to raise international awareness and to act as a focal-point for fund-raising and international dialogue in the fight against micronutrient deficiency diseases.

Further, three international consultative groups were set up under the aegis of the Subcommittee on Nutrition of the United Nations Administrative Committee on Coordination: the International Vitamin A Consultative Group, the International Nutritional Anaemia Consultative Group and the International Council for Control of Iodine Deficiency Disorders. Working groups on iodine deficiency disorders were also set up in several regions of the world.

### G. International cooperation

Providing food security and eliminating hunger and malnutrition have become important objectives in international cooperation. The Development Assistance Committee of the Organization for Economic Cooperation and Development recognized improved food security and adequate nutrition levels as elementary development cooperation objectives. 20/ The World Food Council, at its session in Cairo in May 1989, focused on the elimination of starvation, a tangible reduction in chronic hunger, a substantial reduction in malnutrition and the elimination of major nutritional deficiency diseases. 21/

The International Development Strategy for the Fourth United Nations Development Decade, adopted by the General Assembly in December 1990, the Paris Declaration and Programme of Action for the Least Developed Countries for the 1990s and the World Declaration and Plan of Action on the Survival, Protection and Development of Children all share these objectives.

## CONCLUSION

In 1992, almost 20 years after the World Food Conference had resolved to banish hunger and malnutrition, chronic hunger afflicted some 550 million people around the globe, mostly in the developing world. Millions of people faced famine and starvation caused by both natural and man-made disasters. The international community responded to these adversities by providing food aid and other supplies.

The political and economic transformations in eastern Europe and the former Soviet Union put millions at risk of hunger as the accustomed social safety nets broke down. The replacement of those safety nets is necessary in order to alleviate problems of distribution in those countries.

In developed countries, malnutrition was mostly the result of the consumption of unhealthy food in excessive quantities. The major policy response was one of educating the public about good nutrition. There also emerged in developed countries problems of hunger linked to rising inequality in income distribution and poverty. Voluntary agencies were prominent in providing meals to the hungry.

Micronutrient deficiency diseases, particularly those related to the underconsumption of vitamin A, iron and iodine, were prevalent in virtually all developing countries. Governments and the international community made concerted efforts to reduce the prevalence and harmful effects of those diseases.

The longer-term solution to the problems of hunger and famine lies in attacking their root causes: poverty, highly unequal distributions of income, and unemployment. Increasing agricultural productivity is a part of the solution.

## Notes

1/ See "The global state of hunger and malnutrition". 1992 report of the World Food Council on its eighteenth ministerial session, Nairobi, Kenya, 23-26 June 1992 (WFC/1992/2).

2/ Bread for the World Institute on Hunger and Development, Hunger 1990. A Report on the State of World Hunger (Washington, D.C., 1990), p. 9.

3/ "Update on the nutrition situation", SCN News, No. 4 (Late 1989), p. 4.

4/ "The global state of hunger and malnutrition" ..., pp. 5-6.

5/ Ibid.

6/ See Jean Drèze and Haris Gazdar, "Hunger and poverty in Iraq, 1991", World Development, vol. 20, No. 7 (1992), pp. 921-945.

7/ "Hunger and malnutrition in the world: situation and outlook". 1991 report of the World Food Council at its seventeenth ministerial session, Helsingor, Denmark, 5-8 June 1991 (WFC/1991/2).

8/ Ibid., p. 6.

9/ Bread for the World Institute ..., Hunger 1990 ..., p. 20.

10/ Ibid., pp. 31 and 72.

11/ Ibid., p. 84.

12/ "Update on the nutrition situation", loc. cit., p. 9.

13/ This section is based on Bread for the World Institute ..., pp. 22-36; 45-58 and 70-86.

14/ In addition to providing food, WFP's logistical support is used by the international community in relief operations, including the coordination of port operations, helping in port rehabilitation and improvement, arranging for internal transportation, managing large trucking fleet and airlifting food to remote areas.

## Notes (continued)

15/ "The global state of hunger and malnutrition" ..., p. 9.

16/ WHO, "National strategies for overcoming micronutrient malnutrition" (EB89/27, 27 December 1991), p. 4.

17/ "The global state of hunger and malnutrition" ..., p. 10.

18/ See, for example, "Nutritional strategies for overcoming micronutrient malnutrition" (EB89/27), WHO, pp. 5-22; and FAO, Towards better nutrition for all: preparing for the International Conference on Nutrition" (COAG/91.7), paras. 51-69.

19/ The United Nations entities that sponsored the conference were WHO, UNICEF, FAO, UNDP and the World Bank. The international development agencies of Canada (CIDA) and the United States (USAID) were also sponsors.

20/ OECD, *Development Co-operation in the 1990s* (Paris, 1989), p. 54.

21/ For details, see *Official Records of the General Assembly, Forty-fourth Session, Supplement No. 19* (A/44/19), pp. 1-6.

# Chapter III

# HEALTH

Several major concerns of public health have emerged during the past few years. Cholera, which had been endemic in Asia and Africa, began to spread in parts of Latin America pointing to the deterioration in sanitary conditions there in the 1980s. Malaria re-emerged in parts of Africa and Asia as a widening threat to public health. The AIDS pandemic raged across much of Africa and threatened to do so in parts of Latin America and Asia after its initial spread in Europe and North America. Tuberculosis, which was an affliction common among those living in poverty and overcrowded conditions and was curable with antibiotic drugs, has resurfaced with renewed ferocity in urban centres in the developed countries. Assaults on the environment, poisoning the air and water and releasing pathogenic substances into the atmosphere, most prominently in the former Union of Soviet Socialist Republics and the rural areas of central European countries, have made formerly salubrious habitations injurious to good health and life.

At the same time as there have been remarkable advances in medical technology, the delivery of medical services has run into major problems in most parts of the world. In the developing countries, a shortage of imports has restricted the supply of drugs and equipment. Pressures to cut government expenditure have reduced supplies, personnel and facilities. In the economies in transition, the breakdown of the old system of health care, without the formation of an adequate replacement, and the drop in economic activity and incomes have compounded the problems of providing health services. In the developed countries, there are unresolved problems of inordinate increases in costs of health care and of organizing these services in order to ensure their equitable and efficient delivery.

## A. Health conditions

### 1. Life expectancy and mortality

The average life expectancy at birth for the world in the period 1985-1990 was 63.9 years, a gain of 3.5 years over 1975-1980 (see table III.1). 1/ In the less developed regions, life expectancy was 61.4 years, compared to 74.0 years in the more developed regions. Gains in longevity occurred in all groups of countries, the gain being smaller the higher the figure in the initial year. The difference between the developed and the developing regions has narrowed from 14.6 years in 1975-1980 to 12.6 years in 1985-1990. Yet the range of life expectancy for individual developed and developing countries is very wide, going from 78.3 years in Japan, 77.5 in Iceland and 77.1 in Sweden and Switzerland to 41 years in Sierra Leone and 41.5 in Afghanistan and Guinea-Bissau. 2/

Table III.1. Life expectancy at birth, 1975-1990

(In years)

| Regions and areas | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| World | 60.4 | 62.1 | 63.9 |
| More developed regions | 72.0 | 72.8 | 74.0 |
| Less developed regions | 57.4 | 59.4 | 61.4 |
| Africa | 47.9 | 49.6 | 52.0 |
| Eastern Africa | 47.1 | 47.9 | 50.6 |
| Middle Africa | 45.6 | 47.6 | 49.9 |
| Northern Africa | 53.9 | 56.6 | 59.1 |
| Southern Africa | 55.2 | 57.3 | 59.7 |
| Western Africa | 44.7 | 46.7 | 48.8 |
| Asia | 58.3 | 60.5 | 62.7 |
| Eastern Asia | 67.0 | 68.9 | 70.4 |
| South-eastern Asia | 54.1 | 57.9 | 60.9 |
| Southern Asia | 51.9 | 54.3 | 56.8 |
| Western Asia | 60.6 | 62.5 | 66.7 |
| Latin America | 63.3 | 65.2 | 66.7 |
| Caribbean | 66.2 | 67.7 | 69.0 |
| Central America | 63.4 | 65.6 | 67.6 |
| South America | 63.0 | 64.8 | 66.2 |
| Europe | 72.6 | 73.5 | 74.4 |
| Eastern Europe | 70.7 | 70.8 | 71.4 |
| Northern Europe | 73.3 | 74.5 | 75.5 |
| Southern Europe | 72.8 | 74.0 | 75.0 |
| Western Europe | 73.3 | 74.5 | 75.5 |
| Northern America | 73.3 | 74.7 | 75.6 |
| USSR | 67.9 | 67.9 | 70.0 |
| Oceania | 68.2 | 70.1 | 71.3 |

Source: World Population Prospects 1990 (United Nations publication, Sales No. E.91.XIII.4).

In Africa, the average life expectancy is 10 years lower than in Asia and 15 years lower than in Latin America. In northern and southern Africa, the average life expectancy is about 60 years, while in eastern, middle and western Africa it is close to 50 years. In Asia, the range of averages for the few regions identified is from 56.8 years for southern Asia to 70.4 years for eastern Asia. The largest gains occurred in south-eastern Asia and western Asia, reflecting remarkable progress in reducing mortality in China. Latin America was the developing region with the highest life expectancy, with a fairly small variance among the different regions.

The average life expectancy continues to be higher for females than for males. The difference is greater in the developed countries, where females live on average 7.1 years longer than males, than in developing countries, where the difference is 2.7 years. Larger differences exceeding eight years were observed in the USSR, Poland, France and Finland. 3/ There are differences between urban and rural areas in some of these countries. In Bulgaria, for example, life expectancy at birth for the urban population is 71.7 years and for the rural population, 69.5 years.

Maternal mortality is another important indicator of health status. It is estimated that more than half a million women die each year from causes related to pregnancy and childbirth, 99 per cent of them in the developing countries. Maternal mortality in 1988 varied from about 737 per 100,000 live births in the least developed countries to about 34 per 100,000 live births in the developed market economies. Women in sub-Saharan Africa are 75 times more likely to die from causes related to pregnancy and childbirth than women in western Europe. 4/ Nearly 1 in every 200 pregnancies results in the death of the mother, a maternal mortality rate of 450 per 100,000 live births. Rates up to 1,000 or more per 100,000 live births have been reported in several rural areas of Africa and rates exceeding 500 have been reported in African cities. Most at risk are girls under age 15 who are 10 to 15 times more likely to die in childbirth than women in their twenties. Deaths resulting from unsafe abortions account for a significant proportion of maternal deaths. Because women in many developing countries tend to have many pregnancies, the cumulative lifetime risk of disease in pregnancy may reach 1 in 20.

Whereas in the developed countries there is virtually universal medical attention at childbirth, in the developing countries only 52 per cent of births are attended by trained personnel, and fewer take place in health-care institutions. 5/ The highest proportion of births assisted by a trained health worker in the developing countries is in east Asia, where coverage levels are uniformly high. In south Asia, by contrast, they tend to be drastically lower - 10 per cent. In Africa, the level of maternity health coverage is low. In some countries, no more than 2 per cent of births are attended by health-care workers.

## 2. Infant and child mortality

Infant mortality rates, defined as the number of children in one thousand live births who die in the first year of life, decreased during the past decade more sharply in the developing countries than as a whole in the least developed countries. The gap in infant mortality rates between developing and developed countries has narrowed during the decade. The pace of change and the magnitude of improvement have varied considerably among countries. Yet, an infant born in a developing country was, on average, five times more likely to die during the first year of life than one born in a developed country (see table III.2).

Africa has the highest infant mortality rates in the world, despite a decline from 126 per thousand in 1975-1980 to 103 in 1985-1990. Infant mortality rates in Mauritius fell to 23 per thousand, an exceptionally low level in Africa. Even more remarkable was the achievement in Egypt where infant mortality declined from 115 per thousand live births in 1980-1985 to 65 in 1985-1990. In general, the decline in western Africa was moderate at best, with infant mortality rates in Sierra Leone still above 150 per thousand live births.

In the Latin America and Caribbean region, infant mortality rates ranged from 11 per thousand live births in Barbados during 1985-1990 to 110 in Bolivia. Improvements were more marked in the Central American subregion than in the Caribbean or South American subregions. Among individual countries, impressive gains were registered in Barbados, Cuba and Chile. Infant mortality in Bolivia and Haiti remained exceptionally higher than in the region as a whole.

Infant mortality rates varied enormously among the countries in Asia, ranging from 5 per thousand live births in Japan to 172 in Afghanistan during 1985-1990. Remarkable gains were made in Hong Kong, Singapore, Sri Lanka and Thailand, and in Bahrain and the Syrian Arab Republic. Infant mortality rates in Afghanistan, Bangladesh and India remained exceptionally high.

In the more developed regions significant reductions were being made despite already low levels of infant mortality. The lowest infant mortality rates were in Japan, namely, 5 per thousand, followed by rates below 7 in Finland, Sweden and Switzerland. In 1975-1980, a few developed countries had infant mortality levels exceeding 30 per thousand live births.

Infant mortality rates were much higher in the former USSR and other centrally planned economies than in the developed market economies. During 1985-1990, the highest levels were in the former Yugoslavia and the former USSR at 24 and 25 per thousand, respectively. There were wide differences among the constituent Republics of the former USSR, which have become independent States, with infant mortality rates as low as 12 per thousand live births in the Baltic countries and as high as 40 in parts of the central Asian Republics. 6/

## Table III.2. Infant mortality rates, by region and selected countries, 1975-1990

(Per thousand live births)

| Region and country or area | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| World total | 86 | 79 | 70 |
| More developed regions | 19 | 16 | 15 |
| Less developed regions | 97 | 89 | 78 |
| Africa | 126 | 116 | 103 |
| Eastern Africa | 131 | 126 | 114 |
| Burundi | 137 | 129 | 119 |
| Kenya | 88 | 80 | 72 |
| Madagascar | 150 | 130 | 120 |
| Malawi | 177 | 163 | 150 |
| Mauritius | 38 | 28 | 23 |
| Zimbabwe | 86 | 76 | 66 |
| Middle Africa | 118 | 108 | 98 |
| Angola | 160 | 149 | 137 |
| Chad | 154 | 143 | 132 |
| Congo | 85 | 81 | 73 |
| Northern Africa | 121 | 105 | 79 |
| Algeria | 112 | 88 | 74 |
| Egypt | 131 | 115 | 65 |
| Sudan | 131 | 118 | 108 |
| Tunisia | 88 | 71 | 52 |
| Southern Africa | 98 | 87 | 77 |
| Botswana | 82 | 76 | 67 |
| Swaziland | 140 | 129 | 118 |
| Western Africa | 132 | 121 | 111 |
| Burkina Faso | 162 | 149 | 138 |
| Cape Verde | 70 | 52 | 44 |
| Gambia | 166 | 154 | 143 |
| Guinea-Bissau | 176 | 163 | 151 |
| Senegal | 112 | 97 | 87 |
| Sierra Leone | 179 | 166 | 154 |
| Latin America | 70 | 61 | 54 |
| Caribbean | 65 | 58 | 52 |
| Barbados | 27 | 15 | 11 |
| Cuba | 23 | 17 | 15 |
| Haiti | 121 | 108 | 97 |
| Central America | 65 | 55 | 47 |
| Costa Rica | 30 | 20 | 18 |
| Honduras | 95 | 82 | 69 |
| Mexico | 59 | 50 | 43 |
| Panama | 32 | 26 | 23 |

Table III.2 (continued)

| Region and country or area | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| South America | 73 | 64 | 57 |
| Bolivia | 138 | 124 | 110 |
| Brazil | 79 | 71 | 63 |
| Chile | 46 | 23 | 20 |
| Peru | 105 | 99 | 88 |
| Uruguay | 42 | 34 | 24 |
| Northern America | 14 | 11 | 10 |
| Canada | 12 | 9 | 7 |
| United States of America | 14 | 11 | 10 |
| Asia | 91 | 83 | 72 |
| Eastern Asia | 39 | 37 | 31 |
| China | 41 | 39 | 32 |
| Hong Kong | 13 | 10 | 7 |
| Japan | 9 | 7 | 5 |
| Mongolia | 88 | 78 | 68 |
| South-eastern Asia | 89 | 75 | 63 |
| Indonesia | 105 | 90 | 75 |
| Malaysia | 34 | 28 | 24 |
| Philippines | 54 | 51 | 45 |
| Singapore | 13 | 10 | 8 |
| Thailand | 56 | 37 | 28 |
| Southern Asia | 127 | 113 | 102 |
| Afghanistan | 183 | 183 | 172 |
| Bangladesh | 137 | 128 | 119 |
| India | 126 | 110 | 99 |
| Sri Lanka | 44 | 35 | 28 |
| Western Asia | 101 | 88 | 71 |
| Bahrain | 38 | 22 | 16 |
| Saudi Arabia | 100 | 85 | 71 |
| Syrian Arab Republic | 70 | 59 | 48 |
| United Arab Emirates | 38 | 32 | 26 |
| Europe | 19 | 15 | 13 |
| Eastern Europe | 23 | 19 | 17 |
| Bulgaria | 22 | 17 | 16 |
| Hungary | 27 | 20 | 20 |
| Romania | 31 | 26 | 22 |
| Northern Europe | 12 | 10 | 8 |
| Finland | 9 | 6 | 6 |
| Iceland | 9 | 6 | 5 |
| Norway | 9 | 8 | 7 |
| Sweden | 8 | 7 | 6 |
| Southern Europe | 23 | 18 | 15 |
| Portugal | 30 | 20 | 15 |
| Spain | 16 | 11 | 10 |
| Yugoslavia | 35 | 30 | 25 |

Table III.2 (continued)

| Region and country or area | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| Western Europe | 13 | 10 | 9 |
| France | 11 | 9 | 8 |
| Netherlands | 10 | 8 | 8 |
| Switzerland | 10 | 8 | 7 |
| Oceania | 35 | 30 | 26 |
| Australia | 12 | 10 | 8 |
| New Zealand | 14 | 12 | 11 |
| Papua New Guinea | 85 | 74 | 59 |
| USSR | 28 | 26 | 24 |

Source: World Population Prospects 1990 (United Nations publication, Sales No. E.91.XIII.4), table 45.

A similar pattern of deaths is seen in children under age 5. Table III.3 shows that for the world as a whole, the probability of dying before age 5 declined from 131 to 105 per thousand between 1975-1980 and 1985-1990. The under-five mortality rate continued to decline although economic conditions deteriorated in most of Africa and Latin America. Among the more developed countries, there was a general convergence in mortality rates. The difference between the countries with the highest and the lowest mortality rates became smaller than in the previous decade. Among the less developed countries, there continued to be large differences in both levels and trends between countries. Children under five years of age died at the rate of 318 per thousand in Afghanistan in 1985-1990, a higher rate than in any other country. The disparity between the more developed and the less developed regions also increased during the decade 1980-1990. In 1985-1990, the probability of dying before age 5 in the less developed regions was seven times higher than in the more developed regions, compared to 6.2 times higher a decade earlier.

Among the developing areas of the world, Africa had the highest level of mortality under age 5, with an estimated probability of dying before age 5 of 163 per thousand in 1985-1990. Africa was followed by South Asia (108 per thousand), Latin America (78 per thousand), the developing countries of Oceania (72 per thousand) and the developing countries of East Asia (41 per thousand). Within Africa, under-five mortality was higher than 200 per thousand in Angola, Burkina Faso, Chad, Ethiopia, the Gambia, Malawi, Mali, Mozambique, the Niger, Rwanda, Senegal, Sierra Leone and Somalia. Low child mortality in Botswana may be explained not only by its impressive economic growth during the 1970s and 1980s, but also by the high proportion of women receiving prenatal care and immunization with tetanus toxoid, the high proportion of births delivered by trained health personnel and the high immunization coverage of children.

## Table III.3. Under-five mortality rates, 1975-1990

(Per thousand live births)

| Region and country or area | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| World total | 131 | 118 | 105 |
| More developed regions | 24 | 19 | 17 |
| Less developed regions | 149 | 134 | 119 |
| | | | |
| Africa | 203 | 182 | 163 |
| | | | |
| Eastern Africa | 214 | 204 | 188 |
| Burundi | 219 | 209 | 191 |
| Ethiopia | 262 | 262 | 252 |
| Kenya | 143 | 128 | 113 |
| Madagascar | 119 | 104 | 90 |
| Malawi | 310 | 287 | 263 |
| Mozambique | 282 | 262 | 241 |
| Rwanda | 237 | 223 | 205 |
| Somalia | 262 | 262 | 252 |
| United Republic of Tanzania | 210 | 192 | 174 |
| Zimbabwe | 137 | 128 | 113 |
| | | | |
| Middle Africa | 212 | 195 | 178 |
| Angola | 271 | 251 | 232 |
| Cameroon | 185 | 170 | 153 |
| Chad | 261 | 241 | 223 |
| Congo | 137 | 129 | 115 |
| Zaire | 195 | 178 | 161 |
| | | | |
| Northern Africa | 183 | 152 | 129 |
| Algeria | 165 | 128 | 105 |
| Egypt | 186 | 148 | 124 |
| Sudan | 221 | 198 | 175 |
| Tunisia | 150 | 121 | 99 |
| | | | |
| Southern Africa | 136 | 119 | 103 |
| Botswana | 115 | 106 | 92 |
| Lesotho | 169 | 152 | 135 |
| Namibia | 212 | 194 | 176 |
| | | | |
| Western Africa | 225 | 206 | 188 |
| Burkina Faso | 265 | 254 | 235 |
| Côte d'Ivoire | 185 | 165 | 148 |
| Gambia | 323 | 302 | 281 |
| Ghana | 169 | 161 | 145 |
| Mali | 335 | 312 | 291 |
| Niger | 266 | 246 | 228 |
| Nigeria | 209 | 191 | 173 |
| Senegal | 259 | 240 | 222 |
| Sierra Leone | 335 | 312 | 291 |

Table III.3 (continued)

| Region and country or area | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| Latin America | 99 | 88 | 78 |
| Caribbean | 100 | 91 | 82 |
| Barbados | 31 | 17 | 14 |
| Cuba | 28 | 20 | 18 |
| Dominican Republic | 111 | 94 | 82 |
| Haiti | 207 | 189 | 170 |
| Jamaica | 32 | 27 | 23 |
| Central America | 96 | 84 | 73 |
| Costa Rica | 35 | 24 | 22 |
| Mexico | 87 | 77 | 68 |
| Panama | 47 | 37 | 33 |
| Temperate South America | 49 | 38 | 34 |
| Argentina | 48 | 42 | 38 |
| Chile | 52 | 28 | 24 |
| Uruguay | 49 | 34 | 30 |
| Tropical South America | 109 | 97 | 87 |
| Bolivia | 221 | 197 | 171 |
| Brazil | 107 | 96 | 86 |
| Colombia | 83 | 75 | 68 |
| Ecuador | 116 | 96 | 87 |
| Guyana | 63 | 45 | 37 |
| Paraguay | 74 | 67 | 61 |
| Peru | 156 | 143 | 122 |
| Suriname | 56 | 45 | 37 |
| Venezuela | 56 | 47 | 43 |
| Northern America | 17 | 13 | 11 |
| Canada | 15 | 11 | 9 |
| United States of America | 17 | 13 | 12 |
| Asia | 139 | 124 | 108 |
| East Asia | 54 | 50 | 41 |
| China | 58 | 55 | 44 |
| Hong Kong | 16 | 12 | 10 |
| Japan | 12 | 9 | 8 |
| Republic of Korea | 48 | 39 | 31 |
| Mongolia | 84 | 70 | 58 |

Table III.3 (continued)

| Region and country or area | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| South-eastern Asia | 129 | 111 | 96 |
| Burma | 105 | 97 | 85 |
| East Timor | 374 | 274 | 249 |
| Indonesia | 155 | 135 | 117 |
| Lao People's Democratic Republic | 201 | 180 | 160 |
| Malaysia | 46 | 41 | 35 |
| Philippines | 89 | 83 | 72 |
| Singapore | 16 | 12 | 11 |
| Thailand | 75 | 61 | 49 |
| Viet Nam | 128 | 105 | 91 |
| Southern Asia | 203 | 177 | 160 |
| Afghanistan | 340 | 340 | 318 |
| Bangladesh | 221 | 204 | 188 |
| India | 199 | 167 | 148 |
| Pakistan | 200 | 182 | 165 |
| Sri Lanka | 66 | 52 | 43 |
| Western Asia | 142 | 115 | 95 |
| Bahrain | 48 | 38 | 32 |
| Cyprus | 25 | 18 | 16 |
| Israel | 21 | 16 | 16 |
| Jordan | 88 | 72 | 57 |
| Kuwait | 42 | 27 | 23 |
| Qatar | 59 | 47 | 38 |
| Saudi Arabia | 146 | 120 | 98 |
| Syrian Arab Republic | 97 | 79 | 63 |
| United Arab Emirates | 59 | 47 | 38 |
| Europe | 22 | 17 | 15 |
| Eastern Europe | 27 | 23 | 20 |
| Bulgaria | 27 | 22 | 19 |
| Czechoslovakia | 22 | 18 | 16 |
| Hungary | 29 | 22 | 19 |
| Romania | 39 | 33 | 28 |
| Northern Europe | 15 | 11 | 10 |
| Denmark | 11 | 10 | 9 |
| Finland | 10 | 8 | 7 |
| Norway | 12 | 10 | 9 |
| Sweden | 9 | 8 | 7 |
| United Kingdom | 16 | 12 | 11 |
| Southern Europe | 26 | 20 | 17 |
| Albania | 65 | 55 | 48 |
| Portugal | 36 | 24 | 20 |
| Spain | 19 | 12 | 11 |
| Yugoslavia | 40 | 34 | 28 |

Table III.3 (continued)

| Region and country or area | 1975-1980 | 1980-1985 | 1985-1990 |
|---|---|---|---|
| Western Europe | 15 | 12 | 10 |
| Belgium | 16 | 14 | 12 |
| France | 14 | 11 | 10 |
| Germany | 18 | 13 | 11 |
| Netherlands | 12 | 10 | 9 |
| Switzerland | 12 | 10 | 8 |
| Oceania | 47 | 40 | 33 |
| Australia-New Zealand | 15 | 13 | 10 |
| Australia | 15 | 12 | 10 |
| Fiji | 45 | 37 | 31 |
| New Zealand | 17 | 15 | 12 |
| Papua New Guinea | 121 | 103 | 84 |
| USSR | 37 | 31 | 27 |

Source: Mortality of Children under Age 5: World Estimates and Projections, 1950-2025 (United Nations publication, Sales No. E.88.XIII.4), table A.1.

In Latin America and the Caribbean, Bolivia, Haiti and Peru had high child mortality rates, contrasting with remarkably low rates in Barbados, Chile, Cuba and Costa Rica.

In Asia, in addition to Afghanistan, child mortality rates exceeded 100 per thousand live births in Bangladesh, India, Indonesia, the Lao People's Democratic Republic and Pakistan. There were marked improvements in Bahrain, Jordan and the Syrian Arab Republic.

Among the developed countries, the lowest under-five mortality rates in 1985-1990 were observed in the Scandinavian countries and Japan. Sweden had the lowest rate, namely, 7 per thousand. Impressively low levels of below 10 were found in Finland, the Netherlands and Switzerland. In a few countries, Albania, Romania, Yugoslavia and the former USSR, the rate exceeded 30 per thousand.

The causes of these enormous disparities and the factors that reduce them are by now well understood. Poverty and consequent malnutrition of both mother and fetus are the predominant cause. Frequent pregnancies compound these deficiencies. Infections of all kinds, which opportunistically attack enfeebled bodies, are a second factor. The infectious diseases include acute respiratory diseases such as pneumonia, and diarrhoea, pertussis and measles. With successful programmes of vaccination, acute respiratory infections had become the largest single cause of mortality among children in the developing countries. Ignorance of proper sanitation and inadequacy of health facilities form a third factor. About 60 per cent of all children die from diarrhoea or pneumonia. 7/ Children under five years of age in the developing countries suffer two to three episodes of diarrhoea each year. Between 30 and 50 per cent of all visits by children to treatment facilities and 30 to 40 per cent of their hospitalization is because of acute respiratory infections.

In the former USSR, respiratory infections and parasitic diseases account for nearly half of all infant deaths, compared to less than 10 per cent in the United States. These problems are more acute in the Central Asian Republics (e.g., Turkmenistan and Uzbekistan). 8/ While infectious diseases among children in Central and Eastern Europe have decreased (with the exception of the USSR), there was a marked increase in the number of environmentally induced diseases, especially respiratory diseases, cancers and congenital malformations. Czechoslovakia, Poland and certain parts of the former USSR are those most exposed to environmental health hazards. Almost 25 per cent of the children in the ecologically ruined areas of the former USSR were with genetic abnormalities. Bulgaria, Hungary and Yugoslavia were also exposed to considerable problems related to environmental pollution. In Hungary, bronchitis grew 2.5 times and asthmatic diseases five times during the past decade. In Poland, there was a 70 per cent increase in children's bronchitis over the past decade in the Cracow area, where at least 10 per cent of the children suffered from chronic respiratory diseases. In Czechoslovakia, the number of allergic cases among children increased by 10 per cent, on average, during the past decade.

Although poverty is a major factor in poor health, public sector intervention has secured major successes in reducing infant and child mortality. In Chile, China, Costa Rica, Cuba, Malaysia, Mauritius, Panama and Sri Lanka, infant mortality rates were well below those in other countries at the same income per capita level, highlighting the success of these interventions. Measures to provide adequate nutrition, the education of females, public health policies to eradicate common infectious diseases and better access to health-care facilities have all played a part in these major improvements. Activities of the United Nations Children's Fund (UNICEF) and the World Health Organization (WHO) in promoting oral rehydration therapy (ORT) and the immunization of children against common infections have played another important part. ORT is now used by one family in three in the developing countries and the spread of the technique can save a large number of young lives.

### 3. Morbidity patterns

In 1985-1990, in the developing countries, infections and parasitic diseases continued to be by far the leading cause of mortality, accounting for almost one half of all deaths, compared to 1.4 per cent in the developed countries. 9/ More than 2 billion people, almost half of the world's population, remained exposed to malaria in about 100 countries. Clinical cases were about 107 million per year and mortality 1-2 million per year. About three quarters of those deaths are estimated to occur among children under five years of age. Excluding Africa, where reporting was irregular, although trends varied, a general upward trend in the number of malaria cases has been reported in the Americas and some Asian countries. Some 83 per cent of the total number of reported cases, excluding Africa, were in nine countries: Afghanistan, Brazil, China, India, Mexico, the Philippines, Sri Lanka, Thailand and Viet Nam. In Africa, south of the Sahara, between 2 million and 7 million cases were reported each year. It is estimated that about 90 million clinical malaria cases occur in tropical Africa each year and that 250 million people may carry the parasite.

Another widespread parasitic disease is schistosomiasis, endemic in 76 countries. Some 200 million people are infected with the disease.

It is estimated that in 1990, 1.7 billion people, or one third of the world's population, were infected with tuberculosis and more than 20 million people suffered from the disease. Every year, 8 million new cases are diagnosed. There is a threatening resurgence of tuberculosis in large cities in the developed countries, including Los Angeles and New York, owing to conditions of poverty and the destruction of immune systems as a result of infection with HIV. However, more than 95 per cent of tuberculosis cases occur in the developing countries. 10/

The pattern of morbidity in the developed countries is fairly well established. Of the 11 million deaths that occur annually in these countries, roughly 2.4 million are due to ischemic heart diseases, 2.3 million to cancer, 1.5 million to stroke, 0.9 million to respiratory diseases and 0.8 million to violent causes, including 170,000 as a result of motor vehicle accidents, and at least 180,000 through suicide. Viewed from the standpoint of competing risks from different causes, roughly one in three people (31.6 per cent) will eventually die from heart disease. The chances of dying from cancer are about one in five (19.9 per cent), from a stroke about one in seven (14.4 per cent) and from respiratory disease or of dying a violent death, about 5 per cent in each case. 11/

Cardiovascular diseases are a major cause of morbidity. Approximately one quarter of all deaths in the world each year are due to cardiovascular diseases. In the developed countries, cardiovascular diseases, particularly coronary heart diseases and stroke, are the leading cause of mortality and account for 40 to 50 per cent of all deaths. In the developing countries, they are the second leading cause of death (16 per cent), after infections and parasite diseases (43 per cent). However, among adults, cardiovascular diseases are estimated to claim almost as many lives in the developing countries (6 million) each year as all infectious and parasitic diseases combined. In the 1980s, in the developed market countries, there was a decline in deaths due to cardiovascular diseases. However, the situation was different in the economies in transition: in Bulgaria and Poland, there was an increase of 10 per cent in deaths due to these causes. In Czechoslovakia, Hungary and Yugoslavia, the relevant mortality rate was stable. 12/

Cancer is one of the three main causes of death in both developed and developing countries. Every year about 7 million new cases occur, half of them in the developing countries. About 70 per cent of cancers are attributable to lifestyle and environment. The most common neoplasm for both sexes is cancer of the stomach, incidence rates of which are high in Europe, East Asia and South America. The number of lung cancer cases has been growing, and now comes in second place for both sexes. The vast majority of lung cancer mortality can be attributed to cigarette smoking. In several countries, including Australia, Belgium, Canada, Czechoslovakia, the Netherlands, New Zealand and the United States, the rate of increase of lung cancer among males has slowed considerably, suggesting that the overall level of mortality may soon stabilize or even begin to decline. The highest death rates from the disease occur in the Netherlands (117.4), Belgium (115.7), Czechoslovakia (108.21) and Hungary (107.1), where the level is typically more than three times the rate prevailing in Sweden (35.0) and Portugal (37.9). Among women, the incidence of lung cancer rates are rising rapidly. In those countries where females began smoking earlier (Australia, the United Kingdom and the United States), death from lung cancer among women is substantially higher than in France and Spain. The possibility of death from lung cancer among women in the developed countries is now more than 200 per cent higher than in the early 1950s. Lung cancer is progressively replacing breast cancer as the leading cancer site for women in some countries, in particular the United States. In Japan, the number of women who die from lung cancer exceeds the number of those who die from breast cancer by more than 50 per cent. 13/

Some 300 million people in the world suffer from mental or neurological disorders. Epilepsy affects 8 million people in the developed countries and over 35 million in the rest of the world. The number of mentally retarded persons is between 90 million and 130 million. The number with chronic schizophrenia and those disabled with dementia (typically occurring among the elderly) is increasing. Schizophrenia and other psychoses affect 55 million and some 120 million suffer from affective disorders. Dementias affect 5 to 8 per cent of the population aged over 65, or about 30 million people. 14/ There has also been an increase in mental disturbances.

Suicide is a major cause of death in many countries. Mortality from suicide is now 35 to 40 per cent higher than in the 1950s. In the developed countries, almost 100,000 persons below the age of 65 commit suicide each year. By far the highest suicide rates are in Hungary (67.9 per 100,000 males and 23.2 per 100,000 females). Among males, death rates in excess of 30 per 100,000 are also found in Finland (43.0), Austria (39.3), the USSR (35.2), France (33.7) and Czechoslovakia (31.7). The lowest rates are reported in Spain (10.6), Italy (12.3) and the United Kingdom (11.6). Among females, Denmark, with a suicide rate of 19.3 per 100,000, has the next highest level after Hungary, followed by Iceland, Austria, Belgium, Japan and France, all of which have a rate between 12 and 14 per 100,000. 15/

Accidents and injuries are estimated to account for about 6 per cent of deaths in the developing countries. In the developed countries, the proportion is 7 per cent but is much higher for males (9.6 per cent of deaths) than females (4.3 per cent). The principal causes of disability and death from injuries are associated with motor vehicle accidents, falls, drowning, burns and poisoning.

Traffic accidents are the leading cause of death among young adults (15-34 years) and account for a substantial proportion of premature mortality in the developed countries. Deaths from motor vehicle accidents per 100,000 of population have tended to remain relatively constant during the past five years. Among males, the highest death rate from traffic accidents in the developed countries occurs in Portugal (41.9 per 100,000), followed by Luxembourg (32.3), New Zealand (31.7), Belgium (29.7) and Greece (29.0). Australia, France and the United States show mortality rates between 26 and 27 per 100,000, compared with about 24 in Italy and 21 in Canada and the former USSR. The lowest rates of death from traffic accidents are found in the United Kingdom, Sweden, the Netherlands, Norway and Japan, all of which have mortality levels from motor vehicle accidents between 13 and 15 per 100,000. 16/

In the former USSR, in 1988, mortality due to accidents, injuries and accidental poisoning was 2.5 times higher than in the United States; the suicide rate was 62 per cent higher but homicide was only 81 per cent of the rate in the United States. During the period 1987-1989, the homicide incidence rate increased in the former USSR by 67 per cent. In the previous two-year period (1985-1987), this measure had dropped by 16 per cent from the rate in 1983-1985. The number of deaths from these causes strongly correlates with increasing delinquency. 17/

## 4. AIDS

The spread of the AIDS epidemic in both developing and developed countries has become a health problem of alarming proportions. By mid-1992, some half a million cases of AIDS had been reported in 164 countries. Because of less than complete diagnosis and reporting and delays in reporting, the actual cumulative total number of adult AIDS cases was estimated to be 1.5 million. It is estimated that, by 1991, 12 to 13 million people, including 1 million children, had been infected with HIV. 18/ It is projected that some 40 million will be infected by the year 2000. 19/ Of these, about 1 million a year are expected to die of AIDS.

Of the total number of AIDS cases, one in three is a child. They were born to mothers infected with AIDS and die before five years of age. Other children become orphans after the death of the mother or both parents. Most of these children are in Africa. In sub-Saharan Africa, alone, some 10 million children are likely to be orphaned in this manner.

About 50 per cent of those infected with HIV were in Africa, 40 per cent in the Americas and the balance elsewhere. Since HIV infection started in Asia substantially later than in Africa, the annual number of HIV infections in Asia is expected to increase later in the 1990s. Out of 1 million deaths from AIDS in the year 2000, half will be in Africa, a quarter in Asia and the balance elsewhere. Much less is known about the extent of infection and the incidence of the disease in the former USSR and Eastern Europe. The use of unsterilized injection equipment and contaminated blood and blood products has caused localized outbreaks of HIV infection in the former USSR and Romania. In Poland, 10 per cent to 15 per cent of injecting drug users were also reported to have been infected.

From being primarily an infection among homosexual men and intravenous drug users, HIV has come to attack men and women in equal proportions. In both Africa and Latin America and the Caribbean the proportion of women infected with HIV and afflicted with AIDS is much higher than in North America and Europe. In 1991, in North America, among those infected with HIV, 60 per cent were homosexual men and 18 per cent were intravenous drug users. In Europe, the corresponding percentages were 46 and 30. In contrast, in the Caribbean region, in 1988, the proportion of those infected from heterosexual contact was 65 per cent. In the same year, in the Caribbean region, the incidence of AIDS among men was three times that for women, contrasting with 10 times that for women in North America. In 1992, nearly half of the population infected with HIV in the world were women. At the present time, in contrast to the early 1980s, both the infection and the eventual development of AIDS victimizes a large proportion of women.

The main sources of infection with HIV, the significance of which varies over time and region, include transfusion of contaminated blood and transplanting contaminated body parts, use of contaminated syringes, mostly by narcotic drug users, neonatal infection, and homosexual and heterosexual contact. Over 75 per cent of cumulative HIV infections in adults up to 1992 were through heterosexual contact. In the first six months of 1992, 90 per cent of the increase in AIDS cases were those who had been infected through heterosexual contact. 20/ Infection from sexual contact, increasingly heterosexual contact, and the infection of the foetus by infected mothers are the most frequent and rising risks at the present time.

AIDS has serious socio-economic ramifications, imposing a burden on the population of the developing countries, their economies and their already inadequate health-care systems. The impact of the epidemic on population growth will be noticeable. In Africa, where HIV prevalence rates have reached 10 per cent and greater, deaths due to AIDS among children have already negated gains made by child survival programmes in reducing mortality. Anticipated declines in adult mortality rates are beginning to show signs of reversal. WHO estimates that during the period 1985-1990, AIDS added 10 per cent on average to annual death rates for adults aged 15-49. In five years, for some age groups, mortality rates could double or even triple.

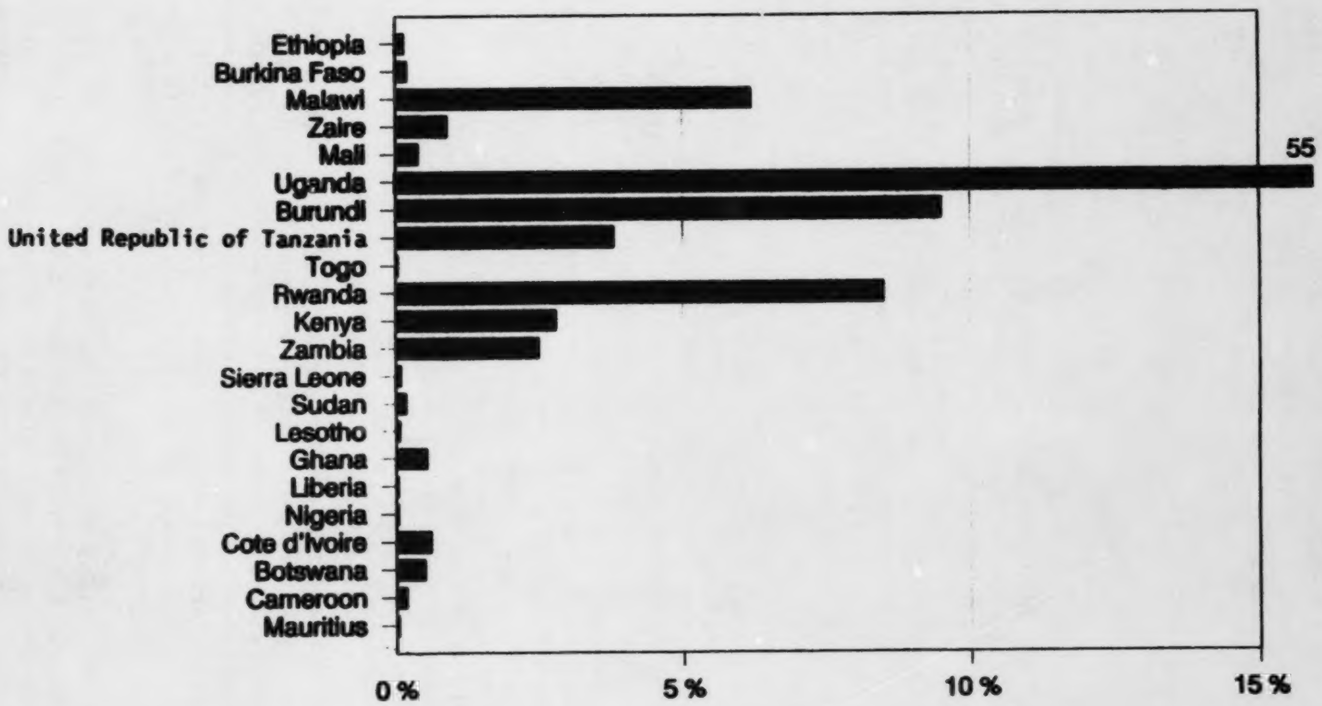
AIDS predominantly strikes adults in the prime of their lives; it does not spare well-educated workers or the urban elite who are among the more productive members of the economy. In the Rakai district of Uganda, transport, agriculture and marketing systems have been severely disrupted. Over a third of the adults in urban centres and 12 per cent of adults in rural areas are estimated to be HIV positive. In Rwanda, a large number of civil servants, teachers and other technically skilled people are infected with HIV. In Zambia, it is likely that 65 per cent of the copper industry's workforce will be infected by the end of this century. 21/ Infection rates in several large African cities are often double those in rural areas. Given the scale of the epidemic in some hard-hit countries, it is likely that AIDS will have measurable effects on per capita income growth and welfare in the long run.

The direct costs of treatment are high, ranging from 78 per cent to 932 per cent of per capita gross national product (GNP) for the annual treatment of a patient in Zaire and from 36 per cent to 218 per cent of per capita GNP for a patient in the United Republic of Tanzania. For many countries, the health and social support infrastructures available are inadequate to cope with the clinical burden of HIV-related diseases. Larger percentages of total government health-care expenditure in Africa was being used on AIDS patients (see fig. III.1). In some African countries, over half of the admissions to hospitals are AIDS cases. 22/ The patients will require long hospital stays and expensive drugs; they will occupy hospital places that other patients with curable ailments will be denied.

As there is no vaccine to prevent HIV infection and no cure for AIDS, only behavioural changes can protect people from infection and eventually AIDS. Avoiding sexual contact with several partners will reduce the risk of infection. Using protective devices such as condoms during sexual intercourse is another means. Avoiding unsterilized instruments such as needles, syringes or other skin-piercing instruments is another requirement. Hospitals need to take special care to protect blood, blood products and donated organs from being the means of infecting a person with HIV. Infected women run the risk of transmitting the virus to a foetus.

While most preventive measures require some resources, education is the most powerful instrument for bringing the nature of the disease and measures of preventing it to the public. It is especially important to educate women, who may, in some cultures, lack authority to prevent an infected partner from transmitting the disease to her. Early diagnosis is an essential element in advising people to modify behaviour. Some developing countries lack the equipment to screen blood. The widespread scarcity of resources in hospitals

Figure III.1. Estimated AIDS treatment cost as a percentage of total government health expenditure, late 1980s



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**Source**: World Bank.

is a principal reason for reusing skin-piercing instruments. The habit of intravenously injecting drugs needs to be cured to eliminate that way of being infected with HIV. HIV cannot be casually transmitted, but those who engage in risky behaviour expose themselves to a higher probability of being infected. As science and technology still have no means of preventing infection nor is there a cure once afflicted, eliminating risks of infection is the only means currently available to ward off infection.

## B. Some issues in health policy

### 1. Immunization efforts

The most dramatic public health success in the developing countries during the past decade has been the immunization of children against diphtheria, pertussis, tetanus, measles, poliomyelitis and tuberculosis. When the World Health Organization launched the Expanded Programme on Immunization in 1974, fewer than 5 per cent of children in the developing countries were immunized. Three years later the target of universal child immunization (UCI) by 1990 was adopted; it aimed at immunizing 80 per cent of one-year-olds in the developing countries. By 1981, about 20 per cent of the world's children had been immunized. In 1990, the goal of 80 per cent immunization coverage of young children was reached.

The remarkable progress of universal child immunization is in part the result of improvement in vaccines and the equipment used to transport and store them. Heat-stable vaccines, reliable cold chains and continuing research and training by a growing number of health workers trained in the management and organization of immunization programmes have contributed to the success of the UCI programme. The massive immunization programmes brought many side benefits which should improve the overall health of children. Public health facilities in rural areas have allowed clinics to offer numerous other services, such as education about oral rehydration therapy. The improved health facilities have also allowed health workers to increase the distribution of vitamin A to reduce mortality and prevent blindness, of iodine to curtail goitre and mental retardation and of simple antibiotics to treat pneumonia. However, approximately 3 million children still die each year from vaccine-preventable diseases.

In the former USSR, the incidence of communicable diseases that could be prevented by immunization has been particularly high. Over the past decade, the incidence of diphtheria, pertussis and polio has been increasing. Morbidity from pertussis has doubled after 1985, reaching 13 cases per thousand. The annual incidence of diphtheria more than doubled between 1980 and 1990. The number of reported polio cases in 1990 was 312, four times higher than in the previous year. 23/

The world now stands poised to achieve the goals for the year 2000 adopted by the World Summit for Children in 1990. Major goals for child health include global eradication of poliomyelitis by the year 2000; elimination of neonatal tetanus by 1995; reduction by 95 per cent of measles deaths and by 90 per cent of measles cases, compared to pre-immunization levels, by 1995, as a major step towards the global eradication of measles in the longer run; maintenance of a high level of immunization coverage, at least

90 per cent of children under age 1, by the year 2000, against diphtheria, pertussis, tetanus, measles, poliomyelitis, tuberculosis and against tetanus for women of child-bearing age; reduction by 50 per cent in deaths due to diarrhoea in children under age 5 and reduction by 25 per cent in the diarrhoea incidence rate; and reduction by one third in deaths due to acute respiratory infections in children under age 5.

## 2. Health-care personnel and hospitals

The availability of health-care professionals varies considerably from one region to another. The African region is poorly supplied with health-care workers. The number of physicians per 10,000 inhabitants does not exceed 0.3 in Burkina Faso, the Niger and Rwanda. In Ethiopia, there is one physician per 100,000 people, 400 times fewer than in the former USSR. Algeria, with over four physicians per 10,000 inhabitants, and Gabon, with three, seem better off among the African countries. Data for nurses show similarly large differences from country to country. The number of nurses per 10,000 population range from 25 in Sao Tome and Principe to 0.4 in Ethiopia.

Some countries in Latin America do not compare unfavourably with the United States in the availability of health-care personnel. In Argentina, the number of physicians per 10,000 people is 27, surpassing that in the United States, at 21 per 10,000 people. Similarly, in Uruguay, there are more dentists per 10,000 people than in the United States. 24/ In Canada, Cuba and Uruguay, the number of physicians per 10,000 people in the mid-1980s was between 19 and 20. However, in most countries of the region, except Cuba and Nicaragua, the rate of growth in health-care personnel has decelerated.

The developing countries in Asia are, in general, low in health-care manpower. In Bhutan and Nepal, the ratio of the number of physicians per 10,000 people is 0.4 and 0.3, respectively. In the mid-1980s, India had 160,000 physicians, 170,000 registered nurses and 168,000 midwives, or about 2.2 of each health-care person per 10,000 people. In the Democratic People's Republic of Korea and Mongolia, there were 23 physicians per 10,000 population, 10 times as many as in India. The ratio of nursing personnel per 10,000 people ranged between one and five in South Asia. In Bangladesh, Bhutan and Nepal, the corresponding ratio was even lower. Doctors outnumber nurses in most countries of South Asia, especially in Pakistan, where the ratio of nurses to doctors was less than 1:3 in 1988. The low ratio in South Asia, with the exception of Sri Lanka, is closely linked to the low social esteem accorded to nursing. Malaysia, Brunei Darussalam and Singapore have invested heavily in the Association of South-East Asian Nations (ASEAN) subregion, improving the availability of doctors, nurses and hospital beds. Although per capita availability of health-care personnel was by far the lowest in Indonesia, there were improvements between 1970 and the mid-1980s, with the ratio of doctors per 10,000 people rising over threefold, while that of nurses more than doubled. 25/ In the mid-1980s, in China, there were 9 physicians, 17 medical assistants and 7 nurses and midwives for every 10,000 people. 26/

In Australia, Japan and New Zealand, the number of physicians per 10,000 people ranged between 15 and 23 and the number of nurses, between 54 and 124. In most countries in Europe the number of physicians per 10,000 people ranged between 15 and 30. Those countries outside this range were Turkey, with 7, and Italy, with 42. There is a striking contrast between the Mediterranean and the Nordic countries. The Mediterranean countries, with a lower gross domestic product per capita, have more physicians per capita than the Nordic countries. Finland and Norway have 22 physicians per 10,000 population, the corresponding figures for Greece and Spain being 31 and 28. However, there are more nurses per capita in the Nordic countries than in Greece and Spain: between 85 and 87 per 10,000 population in Finland, Norway and Sweden, compared with 20 in Greece and 37 in Spain. The explanation probably is the larger requirement of nursing by people in the over-65 age group, who are more numerous in the Nordic countries than in the Mediterranean. The former USSR maintained a huge network of health facilities and employed 44 physicians and 116 mid-level medical personnel per 10,000 people.

### 3. Cost of health care

The rise in costs has been most marked in the United States. In 1990, 12 per cent of GNP was spent on health care. 27/ During the 60 years ending in 1990, per capita expenditure in real terms on health care in the United States increased faster than GNP per capita, 2 to 2.5 times faster after 1950. Evidently, expenditure on health care increases with income. However, the income elasticity of demand for medical care in the United States is somewhere between 0.2 and 0.4, explaining only about 5 to 10 per cent of the increase in the United States. Other factors include the rising number of older people in the population, which accounts for about 2 per cent of the increase. Wider insurance coverage explains about 12 per cent of the increase. The bulk of the increase has been attributed to the introduction of new technology and equipment such as magnetic resonance imaging and new procedures such as coronary artery bypass grafting, renal dialysis, transplantation, artificial joints, endoscopy, monoclonal antibodies and drugs for mental illness.

As these advances in technology become a regular part of medical care in other countries, their costs must also be expected to rise. A lack of resources may well constrain the developing countries from acquiring the new technology.

### 4. Access and equity

A primary objective of the Global Strategy for Health for All by the Year 2000, adopted by WHO, was to achieve equity in the availability of health care. One key to attaining its goals was to make the essential elements of primary health care available to all. Access to primary health care in most developed countries is almost universal, as indicated by the high proportion of children under age 5 for whom permanent child care is available and by the number of pregnant women receiving antenatal care. 28/ In most developing countries, with the expansion of community-based health services and the availability of trained health workers and volunteers at the community level, maternal and child health services coverage has increased. In countries reporting to WHO, which contain about two thirds of the world's pregnant women, 60 per cent of them are reported to receive care from trained personnel during both pregnancy and delivery. In the least developed countries, these percentages are down to 33 and 20, respectively. 29/

There are disparities in access to health-care services depending on one's income, gender and region of residence. In most developing countries, such factors as location, gender and income appear to have great weight in determining access to health services. The rural population, which forms the majority in most developing countries, tends to be discriminated against compared to the politically more powerful and economically more prosperous urban groups. In one third of the developing countries, rural people are only half as likely to be covered by health services as those in urban areas. There is also inequality in the coverage of the social infrastructure.

In Brazil, almost 80 per cent of the national health budget goes to hospital care in urban areas, mainly in the south of the country, while rates of illness and infant mortality in the north-east are among the highest in the world. The Niger devotes 50 per cent of the government health budget to hospital services in urban areas, 40 per cent to provincial facilities in main towns, and only 10 per cent to rural areas, where 80 per cent of the population live. 30/ In the developing countries, 70 to 90 per cent of hospital patients live within 10 kilometres of the facility they use. Consequently, in China, Colombia, Indonesia and Malaysia, the health sector subsidy provided to the average urban household is up to five times larger than that provided to the average rural household. 31/ Whereas 80 per cent of the urban population in Afghanistan was covered by health services, only 17 per cent of its rural inhabitants had access to health facilities. Seventy per cent of Senegal's physicians, 60 per cent of its midwives and 40 per cent of its nurses are concentrated in the Dakar-Cap Vert region, where less than 30 per cent of the population live. In Peru, two thirds of all doctors live in the capital, serving 27 per cent of the population. In most rural areas, where the majority of the poor live, there is only one doctor for every 10,000 inhabitants. 32/

The main hindrance to the provision of health-care personnel to rural areas is that their earnings potential is far greater in urban areas. In some countries, specific measures have been taken to achieve a more equitable distribution of manpower between urban and rural areas. These measures include mandatory services in rural areas for all graduating health professionals, improvements in living and working conditions in difficult areas and financial incentives and brighter career opportunities. Only a few countries have achieved much progress with these policies.

Differences in the availability of health-care facilities between urban and rural areas are also large in the formerly planned economies. Budapest, with 19 per cent of the population, had 36 per cent of the country's physicians and 30 per cent of its hospital beds. In Poland, there were on average 21 physicians per 10,000 persons and 41.4 physicians per 10,000 in the Warsaw district. 33/ In Romania, physicians tended to be concentrated in the western part of the country. In Mongolia, there are difficulties in reaching semi-nomads, who represent nearly half the population, as they move from one place to another during the year and always live at some distance from district or subdistrict centres.

Within the family, gender inequality in access to health care is another aspect of concern. Infant girls are discriminated against in favour of male offspring in nutrition and access to care. Studies in Bangladesh found that boys under five years age were given 16 per cent more food than girls. In

India, too, boys were given far more fatty and milky foods than girls. Not surprisingly, girls were over four times as likely as boys to suffer from acute malnutrition. Girls were more than 40 times less likely to be taken to hospital. It was found that, while the incidence of illnesses in urban slums in Lahore, Pakistan, was the same for both boys and girls, parents were more concerned about the health of their sons, on whose behalf they spent money to consult private practitioners. Fifty-seven per cent of sick boys were taken to a private practitioner as against 37 per cent of sick girls. 34/

Differential feeding, nurturing and care of female children lead to excess female mortality in childhood, and in some cases lower female life expectancy. In many developing countries, more girls than boys die between the ages of one and four years, in sharp contrast to the developed countries, where deaths of boys are more than 20 per cent higher than those of girls in the relevant age group. Death rates between the ages of one and five are higher among girls than boys in Bangladesh, Nepal, Pakistan, Sri Lanka, Egypt, Jordan, Mauritania, Morocco, the Syrian Arab Republic, the Sudan and Turkey and in half of the Latin American countries studied under the World Fertility Survey. 35/ It is reported that in India, Bangladesh and Pakistan the death of one out of every six female infants was due to neglect and discrimination. These differences are indicative of the extent of bias against girls in childhood in access to nutrition, health care and medical attention.

## C. Financing

The market for health-care services is peculiar in that an individual consumer's expenditure on health care must depend heavily on the advice and recommendations of an intermediary - a physician or a surgeon - who normally stands to benefit from that expenditure. Furthermore, major expenditure on health care is episodic and an insurable risk, so that in many countries, health expenditure is financed out of insurance premiums paid by or on behalf of the consumer. These insurance schemes may be government or private sector owned. In some other countries, health-care costs are for the most part paid out of tax revenue. Consumers pay a part of the costs as user fees. In a large number of countries, hospitals and related institutions are the property of the Government and run by them. In most countries, one finds a combination of these arrangements.

In many countries, the rising cost of health care has called forth new solutions to avert fiscal crises. Policies and programmes to restrain costs include reducing unnecessary health services and cutting back on excessive consumption of pharmaceuticals, drawing up a list of basic generic drugs that are equivalent to more expensive products, promoting competition among providers and introducing alternative financing schemes. In several developed countries, restraints have been imposed on payments to hospitals and physicians. The diagnosis-related group payment system in the United States and the prospectively set global budgets in France are examples of price restraint policies embodying incentives reform. The evidence from the United States indicates substantial reductions in the length of stay in hospital as a result of these innovations. Competitive bidding and bulk purchasing, as in the United Kingdom for laundry and food services for hospitals or in the United States under several State Medicaid programmes, are other measures to slow down cost increases. 36/

Making the patient pay part of the costs of medical services has been quite successful in reducing costs. Under the Rand Health Insurance Experiment in the United States, those individuals facing cost-sharing used fewer out-patient and hospital services and hospital emergency departments. In most developed countries there is some cost-sharing, at least in paying for prescription drugs. However, in many countries the payment is nominal: 5 deutsche marks per hospital day for up to 14 days in Germany, 168 Belgian francs per hospital day in Belgium, 300 yen per day for up to 60 days in Japan.

In the developing countries, user fees are a means of cost-sharing. Even a small charge tends to make clients avoid superfluous services. If the charges remain moderate, a majority of the population may find them affordable. Revenue from user charges allows the extension of some services. Revenue from user charges as a percentage of total government expenditure on health services in the early 1980s ranged from 2 per cent in Pakistan to 17 per cent in Colombia. The average for developing countries was 7 per cent. 37/ Health projects in India, Indonesia, Mexico, Sierra Leone and Zaire cover 20 per cent or more of recurrent costs with fees. A project in Cameroon covers 95 per cent of its costs with fees. Mission facilities in Africa cover as much as 70 per cent of their costs with fees. In China, hospitals recover about three quarters of their operating costs through fees and drug sales. In Bolivia, the share of resources generated through user fees rose from 13 per cent in 1984 to 40 per cent in 1988. Cost recovery accounts for about 15 per cent of hospital operating budgets in Honduras and 20 per cent in the Dominican Republic. 38/

Differentiated user fees are employed to improve targeting in favour of disadvantaged households. In the Republic of Korea, under the medical assistance scheme, the poor get free medical care. Those with an income of about $50 per month and subsistence farmers pay 20 per cent of in-patient fees, except in Seoul where they pay 50 per cent. The scheme enables them to receive primary health care at private clinics designated by the Ministry of Health and Social Affairs or from health centres and community health practitioners. About half of the medical facilities nationwide are designated for this purpose. The scheme benefits 3.3 million people, about 8 per cent of the total population. 39/ In Mali, the fee for a day's stay in a small-town health centre is less than 20 per cent of the fee at a main urban hospital. Consultations at a rural health post cost the patient half as much as in an urban health post. Another option is to issue vouchers to the poor, based on certification by local community leaders, as in the case of Ethiopia.

To reduce costs, many countries have promoted the use of generic rather than brand-name drugs and established community pharmacies. Sri Lanka saved a considerable sum by centralizing the purchase of pharmaceutical products through one State company. It obtained essential drugs at less than half the price, and in some cases less than one third the price, paid by the private sector. 40/ The essential drugs programme in the United Republic of Tanzania, which started in 1983, provided a regular supply of 32 to 36 essential drugs to all 3,000 clinics and dispensaries in the rural areas. The drugs were supplied each month in a pre-packed box, with standardized contents matched to the broad health needs of the region. In support of the scheme, a training course was held to provide health-care workers with refresher courses designed to improve the prescription of essential drugs. In Kenya, a new drugs management system for rural health facilities cut down the cost of supplying drugs to the entire population to $0.29 per person by bulk procurement in generic form, standardized treatment schedules that reduce the number of drugs prescribed, and the virtual elimination of wastage and loss. 41/ There have been similar significant savings in several countries that have their own domestic pharmaceutical industries, including Argentina, Brazil, Egypt, India, the Republic of Korea and Mexico.

In the developing countries, health insurance programmes cover only a small proportion of low-income households. Only 15 per cent of the people in the developing countries, not including China, participate in any form of risk coverage for health care. There have been marked improvements in several countries in Latin America in widening insurance coverage. In Brazil, the coverage increased from 23 per cent in the early 1960s to nearly 85 per cent in 1986. In 1974, the system started providing emergency assistance to anyone who needed it; and rural workers - the last group not to be covered - have slowly been brought into the system, with their coverage supported by land and crop taxes. The most recent change is a ruling that membership in the social security system is no longer a prerequisite to receiving medical care from the system, which essentially amounts to 100 per cent coverage. In Mexico, the social security system covered about 35 per cent of the population in 1978 and 56 per cent in 1986. In order to extend the coverage to rural areas, a separate programme was created by the federal Government, which the social security system agreed to manage and fund partially.

China has provided low-cost health services, using several approaches to financing. These include both direct and indirect government spending, insurance plans, and expenditure by collectives and by the private consumer. Government has always paid a significant share of health-care costs. The Government pays staff salaries in health bureaux, public hospitals and other health institutions. There are four main categories of health insurance: the Government Insurance System, which insures 24 million civil servants; the Labour Insurance System, which provides compulsory coverage to about 75 million workers in State-owned enterprises and their dependants; the collectively owned enterprise insurance schemes, which cover about 35 million workers, and township and village enterprises, covering 49 million workers; and remnants of the old commune insurance system and a number of experimental mutual insurance systems. The labour pool and dependants covered by these various insurance arrangements appear to be about 20 per cent of China's population. Another 10 to 15 per cent may have limited communal insurance coverage. There are still about 800 million uninsured Chinese, whose access to health care depends on their ability to pay. 42/ For all practical purposes, all rural, primary health services are now provided on a fee-for-service basis. Rural doctors charge a small consultation fee and earn the bulk of their income from profits on medicines which they dispense.

One of the most significant changes in health-care financing in recent years in Latin America has been the creation of private health insurance schemes. In Chile, a private health insurance scheme was launched in 1981 with the creation of the Private Health Insurance Organizations (Instituciones de Salud Previsional). Workers were allowed to transfer their health insurance from the government-operated system to these institutions. Insurance institutions have working agreements with physicians, medical centres, laboratories and hospitals for the care of their subscribers at set fees. Users can freely choose their provider. Between 1981 and 1985, the number of institutions grew from 2 to 15. The number of those insured rose from 26,000 to 147,000.

In Sri Lanka, the Government encourages competition in the insurance market to promote the development of private insurance. It allows private practice by doctors, while still being employed by the Government. This policy has contributed to a noticeable increase in private facilities, especially in the capital, Colombo.

In several OECD countries health insurance schemes are provided by the Government. In Sweden, a high proportion of the cost of health care is paid for by taxes raised at the county level, supplemented by funds from general social insurance schemes. To help control demand, co-payment requirements by beneficiaries are relatively high. In Canada, there is a national, universal health insurance scheme supervised by the federal Government and financed by both federal and provincial governments. Health-care services are almost entirely provided by private entrepreneurs. In Germany, social welfare insurance is compulsory and absorbs about 13 per cent of the wages. Wealthier and often healthier citizens frequently opt out of public health-care schemes. Their private insurance coverage provides better and more expensive care in a system that may have too many doctors, too many hospital beds and too much medical equipment. Most doctors work on a fee-for-service basis and there are few constraints on provider-induced spending. Federal efforts to control spending are having some effect.

The national health service in the United Kingdom is centrally financed. There have been major changes in its organization in recent years, essentially providing for greater autonomy in the management of budgets and sharper competition among providers. Many of the ancillary services, such as cleaning and laundry, are being provided by private sector enterprises. Denmark and Norway also pay for most health-care services from taxation and provide health care through publicly owned institutions. The United States is unusual in that over half of its health care is paid for privately.

A recent major development in private insurance of health care in the developed countries is the trend towards "managed care", provided under health maintenance organizations (HMOs) and preferred provider organizations (PPOs). These new arrangements have the potential to reduce expenditures through the effective provision of health care. These arrangements include several cost-containment measures, such as lower rates of payment and shared financial risks. Expenditure can be reduced through incentives to provide preventive care (HMOs), reduced rates reimbursement for individual services in exchange for guarantees as to volume (PPOs), the substitution of less expensive home care for institutional care (nursing homes for hospitals) and out-patient for in-patient care (free-standing clinics of various types, home health care, or the prevention of illness).

There are direct incentives through competition to maintain the quality of services rendered. HMOs provide care directly by means of salaried employees working in facilities owned by HMOs. PPOs allow participants to choose among participating professionals. HMOs have assumed some importance. In the United States, enrolment in HMOs increased from 5.7 million in 1975 to 19 million in 1985 and was estimated to increase to 50 million in 1990. 43/ Pre-payment schemes have also been growing in the private health-care markets in Brazil, Chile and Uruguay.

In many developing countries, missionaries and other non-profit providers, independent physicians, pharmacists and traditional healers are all active and important in the health sector. Direct payments to these groups account for up to one half of all expenditure on health in many developing countries. The expansion of non-governmental health services tends to reduce the financial burden on the Government and broaden the consumer's options. In the provision of simple curative care, the private sector providers are often more efficient than the Government and provide better services at low cost. Partnership between the public and the private sectors is common in countries where non-governmental organizations have provided an important share of health-care services. In Rwanda, where missionaries provide 40 per cent of the health-care services, the Government reimburses them for 86 per cent of their staff salaries. The Governments of Zambia and Zimbabwe also cover a substantial part of mission expenditure on health care. 44/ Contracting to non-governmental providers is also common in several countries. In Indonesia, beneficiaries of the employee's health insurance schemes use both government hospitals and private hospitals and practitioners. In the Philippines, private hospitals maintain a certain percentage of beds for charity, and the Government pays a subsidy in respect of those beds in areas where public hospitals are not available. 45/ In some developing countries, laws banning private practice by health-care personnel have been repealed.

Countries in Central and Eastern Europe have initiated a restructuring of their health-care services, while coping with serious shortages of essential drugs, basic medical equipment and disillusionment among health workers. They are exploring ways to raise pay, morale, quality and equity in their health sector by transferring financial responsibility to third-party (insurance) payers and to consumers. They also propose to increase competition among health-care providers. One of the options, for instance, proposed in Poland, focuses on "managed competition" among health-care providers such as family doctors and self-governing hospitals.

## D. Conclusions

In general, there has been considerable progress in the health status of the world's population as evidenced by declining infant mortality rates, rising life expectancy and some improvements in maternal and under-five child mortality. Advances have been made to improve access to at least the essential elements of primary health care and to make available basic curative health services, including care of women during pregnancy and childbirth. A major achievement has been the vaccination of 80 per cent of the world's children against common childhood infections.

Much of the progress observed is clearly attributed to strong government intervention. Better designed and targeted programmes have contributed to steady progress. For example, Chile's dramatic reduction in child mortality in the 1970s and 1980s was achieved through a series of targeted programmes, including subsidies to poor pregnant women, schemes to feed primary school children at school, the rehabilitation of severely malnourished children and improvements to the health infrastructure. China provides another example. Its increase in life expectancy and decline in infant mortality are attributable to a broad, publicly financed disease-prevention strategy, together with accessible and cheap primary health care and income growth.

Mass immunizations, campaigns against parasitic diseases, the provision of safe drinking water and other sanitation measures contributed significantly. The achievements in Costa Rica are attributable to the greater availability of primary health facilities, vaccination campaigns and family-planning programmes. Progress in Sri Lanka is associated with measures to ensure adequate food supplies, the education of women and the provision of State-financed health care throughout the country.

A major contributor to these successes was the focus on affordable low-cost child survival techniques such as immunization and the use of oral rehydration therapy. The immunization of 80 per cent of the world's children has been the most significant public health success in the past decade. The effectiveness of primary health-care strategies, incorporating elements such as immunization, oral rehydration therapy and essential drugs, in achieving substantial improvements in health conditions have been well demonstrated.

Much has also been learned about how to finance and organize health-care services in order to obtain low-cost services satisfying consumers. Experience in Canada, New Zealand and the United Kingdom and in a number of developing countries has demonstrated the effectiveness of competition in obtaining these results. The separation of financing from delivering health-care services has proved effective in both developed and developing countries. Cost-sharing mechanisms, whether by means of user fees or otherwise, have been shown to be an effective instrument to reduce substantially the unnecessary use of health-care facilities. Methods of cost containment as practised by health maintenance organizations and preferred provider organizations have been somewhat successful. Many remarkable advances have been made in medical and surgical procedures for both diagnosis and cure.

Perhaps the major achievements of the past decade have been to establish more clearly than ever before the main parameters of an effective health policy. Good health policy begins with adequate nutrition, safe drinking water, sanitary sewage disposal and the education of females. Immunization against common infectious diseases can be attained at costs affordable even in poor countries. The universal provision of primary health-care facilities improves health conditions at very low cost. Generic drugs and a basic list of drugs have been shown to be inexpensive and adequate.

These achievements notwithstanding, the health of the mass of people in developing countries remains poor. Life expectancy at age 15 in the poorest countries is still 20 years less than in other developing countries. About 25 million children and young adults die each year, mostly from preventable diseases. About 1.5 billion people still lack basic health care. 46/ Many of the public health problems associated with communicable diseases still constitute major challenges. There has been no promising progress in the fight against malaria. The HIV/AIDS epidemic threatens to engulf large masses of both young people and small children in disability, sickness and death from which there is no escape. There are enormous disparities in access to health-care facilities because of a lack of infrastructure, a severe scarcity of resources and misguided policy. In some developed countries faulty organizational forms restrict the availability of health care. In many of these countries, soaring costs of health care have not yet been tethered.

While university hospitals in urban centres are essential for training health-care personnel, every effort must be made to spread health-care facilities to rural areas. Such a spread is unlikely to take place unless noticeable improvements are made in the physical infrastructure in rural areas. The education of females is an essential precondition for the removal of intra-family inequities in access to medical care. Lack of access to health-care services in developed countries because of inability to pay has been shown to be correctable by the reorganization of the provision of those services. The lack of choice in State-financed systems remains a problem but is distinctly less severe than lack of access in systems that are mainly financed by the private sector. Competition among health-care providers has been shown to raise the quality of service and cut prices. Research to discover new drugs and medical and surgical procedures has been fruitful.

The rising cost of health care and the means of financing it are major concerns. Measures to improve public health which can make remarkable contributions to raising the condition of health in most countries, especially the developing countries, do not require the outlay of larger resources. Public health regulations, education about sources of infection and the best means of destroying or avoiding them, the vaccination of children and the introduction of simple and inexpensive procedures such as oral rehydration therapy (ORT) will help reduce morbidity and mortality. Changing risky behaviour patterns remains the only means of warding off HIV infection and eventually AIDS. In general, an important aspect of health services includes efforts to focus on healthy lifestyles and on the roles that the individual and the community must play in ensuring healthy behaviour.

International cooperation to improve health conditions must continue unabated. It is an essential element in strategies to eradicate poverty in developing countries. The work of WHO and UNICEF has helped to define priorities among objectives of public expenditure, introduced cost-effective procedures and stressed the importance of education and community participation in improving health conditions. The emphasis on primary health care in the developing countries owes much to them. More now needs to be done in the transfer of expertise to teach, to design syllabuses and to conduct research.

## Notes

1/ Some of the statistical data on mortality are projections provided by the Population Division of the Department of Economic and Social Development of the United Nations Secretariat. They have, in general, withstood eventual verification in the past.

2/ World Population Prospects 1990 (United Nations publication, Sales No. E.91.XIII.4), p. 27.

3/ World Population Monitoring 1991 (United Nations publication, Sales No. E.92.XIII.2), p. 103.

4/ WHO, Implementation of the Global Strategy for Health for All by the Year 2000, Second Evaluation; and Eighth Report on the World Health Situation, forty-fifth World Health Assembly (A45/3), 6 March 1992, p. 102.

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5/ WHO, World Health Statistics Annual (1991), p. 11.

6/ The Looming Crisis in Health and the Need for International Support, overview of the reports on the Commonwealth of Independent States and the Baltic Countries, prepared by the UNICEF/WHO Collaborative Missions with the participation of UNFPA, WFP and UNDP, 17 February-2 March 1992.

7/ UNICEF, The State of the World's Children, 1991 (Oxford and New York, Oxford University Press, 1991), p. 12.

8/ United States Agency for International Development and United States Department of State, "Health care needs in the Commonwealth of Independent States", background paper, 13 January 1992.

9/ WHO, World Health Statistics Quarterly, vol. 43, No. 2 (1990), p. 102.

10/ WHO, Global Estimates for Health Situation Assessment and Projections (1990), p. 32.

11/ WHO, World Health Statistics Annual (1989), p. 17.

12/ WHO, World Health Statistics Annual (1991), p. 25.

13/ WHO, World Health Statistics Quarterly, vol. 43, No. 2 (1990), p. 110.

14/ WHO, Implementation of the Global Strategy for Health for All by the Year 2000, Second Evaluation; and Eighth Report on the World Health Situation, p. 114.

15/ WHO, World Health Statistics Quarterly, vol. 43, No. 2 (1990), p. 112.

16/ Ibid., p. 112.

17/ International Journal of Health Services, vol. 21, No. 3 (1991), p. 495.

18/ Note by the Secretary-General on the prevention and control of acquired immune deficiency syndrome (AIDS) (A/47/289-E/1992/68).

19/ The Global AIDS Policy Coalition based at Harvard University, Cambridge, Massachusetts, estimated that the relevant figure might be 110 million.

20/ Report of the Secretary-General on the prevention and control of HIV/AIDS and programmes addressed to the mitigation of its negative socio-economic consequences (E/1992/67).

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21/ Choices, The Human Development Magazine, vol. 1, No. 1 (April 1992), p. 19.

22/ World Bank, World Development Report 1991 (Oxford and New York, Oxford University Press, 1991), p. 63.

23/ United States Agency for International Development and United States Department of State, "Health care needs in the Commonwealth of Independent States" ...

24/ WHO, World Health Statistics Annual (1988), p. 48.

25/ Economic and Social Survey of Asia and the Pacific 1990 (United Nations publication, Sales No. E.91.II.F.10), p. 169.

26/ WHO, World Health Statistics Annual (1988), p. 62.

27/ This account is based mainly on Joseph P. Newhouse "Medical care costs: how much welfare loss?", Journal of Economic Perspectives, vol. 6, No. 3 (September 1992), pp. 3-21.

28/ WHO, World Health Statistics Quarterly, vol. 43, No. 1 (1990), p. 29.

29/ WHO, Global Strategy for Health for All by the Year 2000, second report on monitoring progress in implementing strategies for health for all, forty-second World Health Assembly (A42/4), 10 March 1989, p. 239.

30/ "Financing health services in developing countries: an agenda for reform", a World Bank policy study (1987), p. 17.

31/ Ibid., p. 23.

32/ World Bank, World Development Report 1990, (Oxford and New York, Oxford University Press, 1990), p. 78.

33/ Social Science and Medicine, vol. 31, No. 8 (1990), p. 863.

34/ WHO/UNICEF/FHE 86.2, p. 11.

35/ UNFPA, The State of World Population 1989 (New York, 1989), p. 6.

36/ OECD, "Financing and delivering health care", Social Policy Studies, No. 4 (1987), p. 95.

37/ World Bank, Charles C. Griffin, User Charges for Health Care in Principle and Practice (Washington, D.C., 1988), p. 21.

38/ Health Policy and Planning, A Journal of Health in Development, vol. 5, No. 4 (December 1990), p. 30.

39/ WHO, Economic Support for National Health for All Strategies (A/40/Technical discussions/2) (1987), p. 68.

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40/ Human Development Report 1991 (New York, Oxford University Press, 1991), p. 63.

41/ WHO, Economic Support for National Health for All Strategies ..., p. 75.

42/ World Bank, "Long-term issues and options in the health transition", China, vol. I (1990), p. 108.

43/ OECD, "Financing and delivering health care" ... p. 96.

44/ World Bank, World Development Report 1991 ..., p. 68.

45/ Health Policy and Planning, vol. 3, No. 2 (June 1988), p. 2.

46/ UNDP, Human Development Report 1991 ..., p. 24.

# Chapter IV

## EDUCATION AND LITERACY

Education policy has received sustained attention during the 1980s. Governments in both developed and developing countries, non-governmental organizations, parents' associations, international organizations and international financial institutions sought to reorient education policy in response to several pressures. After more than 40 years since the adoption of the UNESCO Charter, recognizing everyone's "right to education", more than 100 million children, in 1990, including at least 60 million girls, were without access to primary schooling; more than 960 million adults, two thirds of them women, were illiterate; more than 100 million children and countless adults failed to complete basic education and there were millions more who satisfied attendance requirements but did not acquire knowledge and skills. If enrolment ratios remain at current levels, by the year 2000 there will be more than 160 million children world wide without access to primary schools. 1/

Public expenditure on education in the developing countries increased from 3.8 per cent of GNP in 1980 to 4.1 per cent in 1988. However, when allowance is made for population growth, there was a drop in real resources allocated to education. In 1988, public expenditure on education per person in the developing countries was US$ 33, compared to US$ 769 in the developed countries (see table IV.1). Much tighter budgets in the developing countries resulted in a distinct break in educational progress.

Table IV.1. Public expenditure on education, 1970, 1980 and 1988

| | Public expenditure on education as a percentage of gross national product | | | Public expenditure on education, per person (In millions of United States dollars, at current prices) | | |
|---|---|---|---|---|---|---|
| Region | 1970 | 1980 | 1988 | 1970 | 1980 | 1988 |
| Developing countries | 3.3 | 3.8 | 4.1 | 7.0 | 30.0 | 33.0 |
| Africa (excluding Arab States) | 3.7 | 5.1 | 5.0 | 7.0 | 33.0 | 16.0 |
| Asia (excluding Arab States) | 3.5 | 4.6 | 4.3 | 10.0 | 38.0 | 68.0 |
| Arab States | 5.0 | 4.4 | 6.4 | 15.0 | 112.0 | 134.0 |
| Latin America and Caribbean | 3.3 | 3.9 | 4.4 | 20.0 | 91.0 | 90.0 |
| Developed countries | 5.7 | 6.0 | 5.8 | 136.0 | 469.0 | 769.0 |
| World | 5.4 | 5.5 | 5.5 | 57.0 | 143.0 | 207.0 |

Source: UNESCO, Statistical Yearbook, 1982 and 1990 (Paris), table 2.12.

The distribution of resources among the different levels of education and to vocational education as well became a question of much significance. Many developing countries with net primary enrolment ratios of less than 90 per cent allocated 60 per cent or more of public expenditure on education to primary education. In several developing countries, including Guinea and Nepal, the proportion of current public expenditure allocated to tertiary education exceeded 25 per cent. In 23 out of 26 developed countries, the comparable allocation was less than 20 per cent. In a large number of developing countries, the allocation to vocational technical education was less than 5 per cent.

## A. Enrolment in school

### 1. Primary level

By 1990, in most developing countries, there was provision for compulsory education lasting 5 to 12 years (see table IV.2). This is indicative of their desire to extend education widely and equitably. However, these goals were achieved in only a few developing countries. In most developing countries, especially in Africa, enrolment at the primary level continued to be low. The net enrolment ratio (the proportion of children in the age group enrolled in primary schools) for the age group 6-11 in the developing countries, was 78 per cent in 1990: 59 per cent in Africa; 76 per cent in the Arab States; 81 per cent in Asia and 88 per cent in Latin America and the Caribbean. Some of the lowest primary level net enrolment ratios, around 1988, were in Benin, Burkina Faso, Chad, Djibouti, Ethiopia, Guinea, Guinea-Bissau, Mali, Mozambique, Haiti and Afghanistan. In the OECD countries and the economies in transition, the primary level net enrolment ratio was 92 per cent in 1990.

Globally, the increase in enrolment fell from 5.4 per cent per annum during the period 1970-1980 to 1.3 per cent per annum during 1980-1988 (see table IV.3). The deceleration was not due to a saturation in net enrolment. Out of the 37 developing countries for which there were data, only 12 countries, all of them, except Botswana, in Asia and Latin America and the Caribbean, had a net enrolment ratio of 90 per cent or over. Even where the enrolment ratio was 90 per cent or over, enrolment grew faster in the Islamic Republic of Iran, Mauritius, Paraguay, Singapore and Tunisia in the 1980s than in the 1970s. In contrast, there was no developing country with a net enrolment ratio less than 40 per cent in which growth in enrolment accelerated (see table IV.4). In fact, in sub-Saharan Africa and the Arab States, 20 to 25 per cent of children of school-age did not have access to primary schooling.

Not all pupils enrolled in primary schools reached grade four, which is the minimum necessary for the acquisition of literacy. Those who did not, swelled the ranks of the illiterate.

Retention rates varied in the developing regions. 2/ Even in East Asia, about one sixth of the age cohort at the end of the 1980s did not stay in school long enough to complete grade four. In Latin America and the Caribbean, 36 per cent of the relevant age cohort did not complete grade four; in South-East Asia, the figure was 41 per cent and in sub-Saharan Africa, 45 per cent. In sub-Saharan Africa alone, the proportion of children enrolled in primary school who did not complete grade four increased between 1980 and 1988.

Table IV.2. Distribution of developing countries or areas by duration of compulsory education, 1990

| Years of compulsory education | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Madagascar | Benin | Lesotho | Angola | Algeria | Congo | Antigua and Barbuda | Bermuda |
| Colombia | Burkina Faso | Mali | Chad | Comoros | Gabon | Barbados | Saint Kitts and Nevis |
| Bangladesh | Burundi | Morocco | Malawi | Egypt | Ghana | Grenada | |
| Iran (Islamic Rep. of) | Cameroon | Mozambique | Niger | Liberia | Bahamas | | |
| Macau | Cape Verde | United Rep. of Tanzania | Rwanda | Libyan Arab Jamahiriya | Dominica | | |
| Myanmar | Central African Rep. | Zambia | Somalia | Namibia | Venezuela | | |
| Nepal | Côte d'Ivoire | Argentina | Western Sahara | Seychelles | Dem. People's Rep. of Korea | | |
| Viet Nam | Djibouti | | Zimbabwe | Costa Rica | Sri Lanka | | |
| | Ethiopia | | Belize | El Salvador | Nauru | | |
| | Guinea | | Dominican Rep. | Brunei Darussalam | | | |
| | Guinea-Bissau | | Bolivia | China | | | |
| | Nigeria | | Brazil | Jordan | | | |
| | Senegal | | Chile | Malaysia | | | |
| | Togo | | Guyana | Kiribati | | | |
| | Zaire | | Afghanistan | Tuvalu | | | |
| | Cuba | | Democratic Yemen | | | | |
| | Guatemala | | Kuwait | | | | |
| | Haiti | | Lao People's Dem. Rep. | | | | |
| | Honduras | | Mongolia | | | | |
| | Jamaica | | | | | | |
| | Mexico | | | | | | |
| | Nicaragua | | | | | | |
| | Panama | | | | | | |
| | Trinidad and Tobago | | | | | | |
| | Ecuador | | | | | | |
| | Paraguay | | | | | | |
| | Peru | | | | | | |
| | Suriname | | | | | | |
| | Uruguay | | | | | | |
| | Cambodia | | | | | | |
| | Indonesia | | | | | | |
| | Iraq | | | | | | |
| | Rep. of Korea | | | | | | |
| | Philippines | | | | | | |
| | Syrian Arab Rep. | | | | | | |
| | Thailand | | | | | | |
| | United Arab Emirates | | | | | | |
| | Yemen | | | | | | |
| | Tonga | | | | | | |

Source: United Nations/DESD, based on UNESCO, Statistical Yearbook, 1990 (Paris), table 3.1.

### Table IV.3. Average annual increase in enrolment, 1970-1980 and 1980-1988, enrolment ratio and female enrolment

(Percentage)

| World and regions | Average annual increase in enrolment |  | Enrolment ratio (both sexes) |  | Female enrolment |  |
|---|---|---|---|---|---|---|
|  | 1970-1980 | 1980-1988 | 1980 | 1990 | 1980 | 1988 |
|  |  | I. All three levels |  |  |  |  |
| Developing countries | 8.6 | 1.7 | 45.6 | 48.6 | 42 | 44 |
| Africa (excluding Arab States) | 6.7 | 2.0 | 39.6 | 42.1 | 42 | 44 |
| Asia (excluding Arab States) | 9.1 | 1.3 | 45.5 | 47.7 | 42 | 43 |
| Arab States | 6.2 | 4.6 | 45.5 | 53.9 | 39 | 42 |
| Latin America/Caribbean | 5.0 | 2.1 | 58.8 | 64.0 | 49 | 49 |
| Developed countries | -0.3 | 0.2 | 67.2 | 72.2 | 49 | 49 |
| World | 5.4 | 1.3 | 49.9 | 52.7 | 44 | 45 |
|  |  | II. Primary |  |  |  |  |
| Developing countries | 8.1 | 1.1 | 69.6 | 77.8 | 44 | 45 |
| Africa (excluding Arab States) | 6.1 | 1.6 | 58.5 | 59.8 | 44 | 44 |
| Asia (excluding Arab States) | 8.8 | 0.6 | 70.5 | 80.8 |  |  |
| Arab States | 5.0 | 4.0 | 68.1 | 76.4 | 41 | 43 |
| Latin America/Caribbean | 4.7 | 1.5 | 82.4 | 87.6 | 49 | 48 |
| Developed countries | -2.8 | 0.0 | 92.2 | 91.5 | 49 | 49 |
| World | 4.8 | 0.9 | 73.5 | 80.1 | 45 | 46 |
|  |  | III. Secondary |  |  |  |  |
| Developing countries | 10.3 | 3.1 | 43.0 | 48.2 | 39 | 41 |
| Africa (excluding Arab States) | 11.5 | 4.1 | 42.9 | 45.7 | 34 | 38 |
| Asia (excluding Arab States) | 9.9 | 2.7 | 41.8 | 46.3 | 39 | 40 |
| Arab States | 9.1 | 6.0 | 42.9 | 53.7 | 37 | 41 |
| Latin America/Caribbean | 5.0 | 3.6 | 62.6 | 71.6 | 50 | 51 |
| Developed countries | 2.7 | 0.1 | 81.0 | 88.3 | 50 | 50 |
| World | 6.9 | 2.1 | 50.6 | 55.1 | 43 | 44 |
|  |  | IV. Tertiary |  |  |  |  |
| Developing countries | 9.4 | 4.4 | 15.6 | 16.4 | 34 | 38 |
| Africa (excluding Arab States) | 6.9 | 7.1 | 6.4 | 10.0 | 18 | 19 |
| Asia (excluding Arab States) | 6.9 | 3.7 | 15.8 | 15.7 | 31 | 35 |
| Arab States | 13.2 | 5.4 | 16.6 | 22.0 | 31 | 35 |
| Latin America/Caribbean | 11.2 | 4.6 | 23.6 | 27.1 | 43 | 46 |
| Developed countries | 3.3 | 1.3 | 30.8 | 37.9 | 48 | 50 |
| World | 5.2 | 2.6 | 16.1 | 17.5 | 42 | 45 |

Source: UNESCO, Statistical Yearbook, 1967 (Paris), tables 2.1 and 2.3 and Statistical Yearbook, 1990, tables 2.11 and 2.16.

Table IV.4. Distribution of developing countries by level of enrolment, 1988, and rate of growth of enrolment in primary education, 1980-1988

(Percentage)

| Countries where enrolment decelerated a/ | | | | Countries where enrolment accelerated a/ | | | |
|---|---|---|---|---|---|---|---|
| Less than 40 | 40-60 | 61-89 | 90 and over | Less than 40 | 40-60 | 61-89 | 90 and over |
| Ethiopia | Benin | Algeria | Botswana | | Morocco | Costa Rica | Mauritius |
| Guinea | Central African Republic | Madagascar | Chile | | Senegal | | Tunisia |
| Afghanistan | | Malawi | Cuba | | Uganda | | Paraguay |
| | | Swaziland | Jamaica | | | | Iran (Islamic Republic of) |
| | | Brazil | Mexico | | | | Singapore |
| | | El Salvador | Panama | | | | |
| | | Bangladesh | China | | | | |
| | | Iraq | Indonesia | | | | |
| | | Kuwait | Philippines | | | | |
| | | Nepal | Qatar | | | | |
| | | Oman | Syrian Arab Republic | | | | |
| | | | United Arab Emirates | | | | |

Source: United Nations/DESD, based on UNESCO, Statistical Yearbook, 1972, table 3.2, 1982, table 3.4 and 1990, tables 3.2 and 3.4.

a/ The comparison is with rates of growth in 1970-1980.

### 2. Tertiary level

In 1990, enrolment at the tertiary level in the developing countries was 16.4 per cent of the age group compared to 37.9 per cent in the developed countries. In sub-Saharan Africa, the ratio was 10 per cent, in Asia, 16 per cent, in the Arab States and Latin America and the Caribbean, more than 20 per cent (see table IV.3). The aggregates mask large disparities among countries. In most African countries, in some Asian and Pacific countries and in a few Central American countries, the gross enrolment ratio at the tertiary level was below 5 per cent. 3/

In many developing countries, the proportion of public funds allocated to vocational and technical education and training in 1988 was 5 per cent or less. 4/ In contrast, 25 per cent or more of current public expenditure was devoted to tertiary education in some developing countries, including Guinea and Nepal. Of the developing countries listed in table IV.2, 23 allocated less than 20 per cent of current public expenditure to tertiary education.

## B. Literacy and adult education

Despite gains in school enrolment world wide in the past 30 years, illiteracy is still a major problem. 5/ There were 948 million adults aged 15 years and over in the world who were illiterate in 1990, of which 97 per cent were in the developing countries (see table IV.5). Illiteracy among females was higher than among males (see figure IV.1). It was also higher among rural residents than among urban residents. While the relative magnitudes of the illiterate population fell in all regions of the world, the absolute figures rose in sub-Saharan Africa, South Asia and the Arab States; they tapered off in East Asia and Latin America and the Caribbean. If present trends continue to the year 2000, there will be close to one billion illiterate adults in the world, 98 per cent of them in the developing countries.

Even where literacy campaigns have been carried out successfully and the illiterate have acquired literacy, there are problems of literacy consolidation, retention and use.

Various volunteers, including primary-schoolteachers, literate farmers, village leaders and literacy graduates themselves, were used in both the literacy campaigns and the post-literacy campaigns meant to prevent the new literates from relapsing into illiteracy. The success of the campaigns was due in no small measure to the activities of these volunteer teachers, whose hallmark was dedication, commitment to the campaigns' goals and objectives and political awareness.

In the developing countries in which literacy campaigns were successful, for instance, Brazil, China, Cuba, Ethiopia, Nicaragua, the United Republic of Tanzania and Viet Nam, permanent, post-literacy adult programmes were set up to continue the process of lifelong learning.

Table IV.5. Estimated illiterate population aged 15 years and over, 1970, 1985, 1990 and 2000

| | Number | | | | Ratio of illiterate to population 15 years and over | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Both sexes | | | | Male | | | Female | | |
| | 1970 | 1985 (In millions) | 1990 | 2000 a/ | 1970 | 1985 | 1990 | 2000 a/ | 1970 (Percentage) | 1990 | 2000 a/ | 1970 | 1990 | 2000 a/ |
| Developing countries | 842.3 | 907.2 | 916.6 | 919.7 | 54.7 | 39.3 | 34.9 | 28.1 | 42.2 | 25.1 | 19.7 | 67.4 | 45.0 | 36.8 |
| Sub-Saharan Africa b/ | 115.0 | 133.9 | 138.8 | 146.8 | 77.4 | 59.2 | 52.7 | 40.3 | 67.5 | 41.0 | 29.8 | 86.8 | 63.9 | 50.4 |
| Arab States b/ | 49.7 | 58.6 | 61.1 | 65.6 | 73.5 | 54.5 | 48.7 | 38.0 | 60.5 | 35.7 | 26.9 | 86.3 | 62.0 | 49.4 |
| Latin America/Caribbean | 43.0 | 44.6 | 43.9 | 41.7 | 26.2 | 17.7 | 15.3 | 11.5 | 22.5 | 13.6 | 10.3 | 29.9 | 17.0 | 12.7 |
| East Asia | 324.1 | 295.3 | 278.8 | 236.5 | 46.8 | 28.5 | 23.8 | 17.2 | 32.7 | 14.3 | 10.0 | 61.3 | 33.6 | 24.6 |
| South Asia | 302.3 | 374.8 | 398.1 | 437.1 | 68.7 | 57.8 | 53.9 | 45.9 | 55.2 | 40.9 | 33.8 | 83.1 | 67.8 | 58.8 |
| Least developed countries c/ | 104.8 | 138.4 | 148.2 | 170.1 | 77.5 | 65.2 | 60.4 | 51.0 | 68.1 | 48.6 | 39.2 | 87.0 | 72.1 | 62.7 |
| Developed countries | 47.8 | 42.3 | 31.5 | 15.7 | 6.2 | 4.6 | 3.3 | 1.5 | 5.0 | 2.6 | 1.0 | 7.3 | 3.9 | 2.0 |
| World | 890.1 | 949.5 | 948.1 | 935.4 | 35.8 | 29.4 | 26.5 | 21.8 | 30.4 | 19.4 | 15.4 | 46.5 | 33.6 | 28.2 |

Source: UNESCO, Compendium of Statistics on Illiteracy, 1990 edition, No. 31 (Paris, 1990), tables 1 and 2.

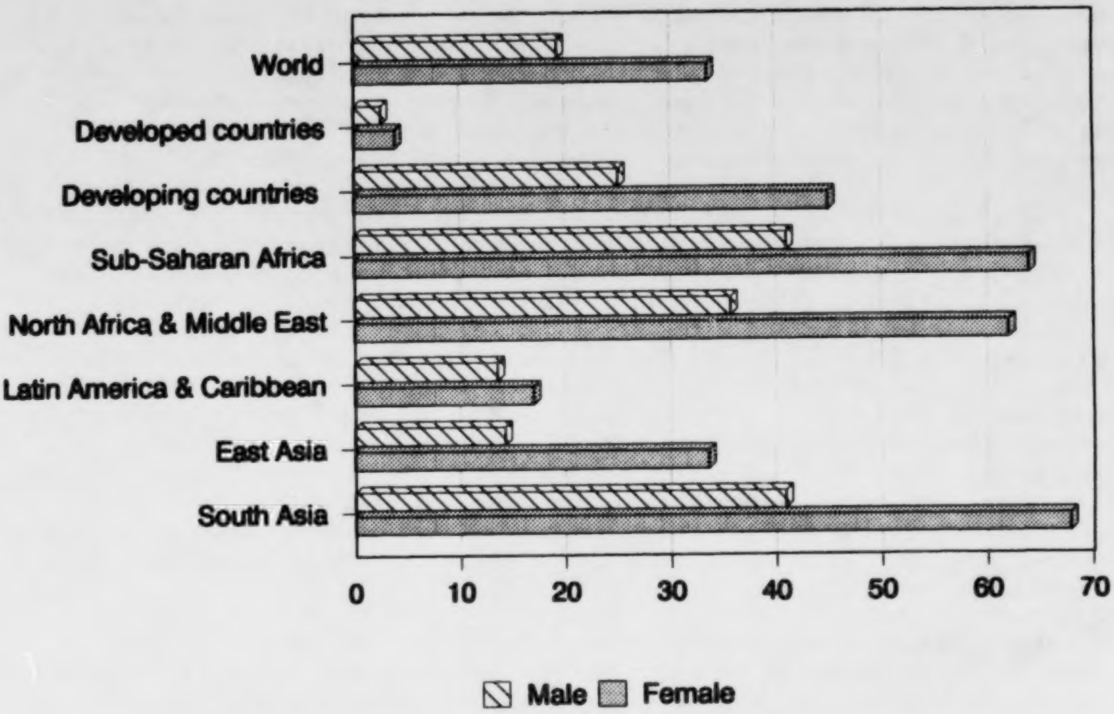
a/ Projected.

b/ Some sub-Saharan African countries are included in Arab States, as well.

c/ The 42 least developed countries are included in their respective regions, as well.

Figure IV.1. Illiteracy rates by sex, 1990

(Percentage)



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Source: UNESCO, Compendium of Statistics on Illiteracy, 1990 edition, No. 31 (Paris, 1990).

New institutions were also established. The means used to prevent backsliding included village newspapers, community libraries and reading centres, special pages in newspapers for new literates, wall posters and booklets on such subjects as agriculture, fisheries, forestry, health, radio and television programmes and facilities for further education and training. For example, in order to avoid a relapse into illiteracy and to keep the momentum of the literacy campaign going, the Government of Ethiopia provided more than 4,000 reading rooms, together with booklets dealing with health, agriculture, family life and political education. In Nicaragua, enthusiastic students and others were kept as teachers for post-literacy and adult education activities. The United Republic of Tanzania established rural newspapers and libraries as part of its post-literacy measure. 6/

Adult literacy programmes remained important features of education policy in most countries. They were used for purposes well beyond those of providing literacy, and radio and television media were most useful in these endeavours. In countries where illiteracy rates are low, for instance Malaysia, the Republic of Korea and Singapore, post-literacy campaigns provide technical skills training. In Canada, adult literacy programmes are conducted as institutional programmes (by colleges), workplace programmes (taking programmes to the people) and community-based programmes (which have much leeway in experimenting and innovating in delivering their services). In British Columbia, adult education encompasses adult literacy, career development and trades programmes. Knowledge and skills are imparted to out-of-school youths and adults through curriculum guides, resource books and student learning materials to give them a second chance to acquire skills and become productive citizens. 7/

In Afghanistan, Bangladesh, India, Indonesia, the Islamic Republic of Iran, Pakistan, Thailand and Viet Nam, literacy campaigns were used to support community development. Some of these countries have campaigns specifically for illiterate women and girls.

In the Philippines, the Institute for Science and Mathematics Education Development of the University of the Philippines used adult education as a vehicle for initiating many community-based projects, which contributed to improving living standards. For example, at San Salvador, a fishing village in the southern province, in addition to literacy classes and the building of a reading centre, seminars and workshops were conducted for adults on methods for increasing their income-earning capacity and improving their diets and surroundings. The programmes at San Salvador included appropriate fishing methods, making better fishing nets, repairing boat engines, salting and smoking fish, preparing locally available nutritious foods and making water-sealed toilets. Community campaigns were also organized for such productive activities as vegetable gardening in trenches and used containers, malunggay tree-planting (a fast-growing tree whose leaves are used as vegetables) and a medicinal garden. A sewing circle for mothers was also established.

In Africa, Botswana, Lesotho and Zambia combined the teaching of basic reading, writing and arithmetic with some agriculture-related skills in their adult literacy campaigns.

In some Central American countries, programmes to help out-of-school youths took the form of integrated rural reform since they entailed improvements in literacy, health and productivity and in rural life generally.

In Brazil, 8/ the Government set up an agency, MOBRAL, to conduct non-formal lifelong education for illiterate youths and adults. It carried out initial functional literacy programmes in all municipalities of Brazil and also established post-literacy activities, which included programmes for cultural development and the improvement of health. These programmes covered the entire country and volunteers were extensively used. The success of the Brazilian literacy programmes was credited to its reliance on professional and organizational competence as well as the maintenance of balance between central policy direction and decentralized execution of programmes at the local level.

In China, 9/ adult education has always been given priority by the Government and people since the founding of the People's Republic of China in 1949. Its objectives have been to improve the level of education of the people, to reduce inequality by giving opportunities to those who have not benefited from education, to popularize science and technology and to train qualified manpower. Adult education is the concern not only of the Government but also of labour unions, factories, mines and other enterprises. Townships, villages and other economic units mobilize peasants to build and equip schools and choose from among them those who can teach.

About 20 per cent of the population 15 years and over in the developed countries is functionally illiterate. 10/ Governments, labour unions, business and industry joined hands to implement literacy programmes.

The use of computers in some of the workplaces allowed the participants to learn at their own pace and also provided flexibility among learning, work and other duties.

In several developed countries, non-formal, post-compulsory level education and training programmes were conducted to equip adults - the unemployed, women and disadvantaged groups - with marketable skills. In Belgium, Germany and the Netherlands, attendance at an educational or training institution up to the age of 18 is required. In some countries, for example, Germany and Switzerland, most young people enter apprenticeships with a view to having both on-the-job training and part-time education. Post-compulsory level education in other countries, for instance, France, Italy, the Netherlands and the United Kingdom, is an amalgam of work in schools, colleges, apprenticeship and training schemes. In the United States, comprehensive, all-embracing adult literacy programmes teach out-of-school youths and adults not only basic literacy skills but also occupational skills and competencies that would enable them to hold jobs and lead more productive and satisfying lives.

### C. Women's access to education, especially in science

In most developing countries, fewer females than males and fewer rural children than urban children had access to schools. Within technical and vocational education, there is a preponderance of female enrolment in such fields as domestic science, commercial/secretarial studies, health and craft skills, where emoluments are usually lower than in the fields in which males predominate, for example, masonry, electronics, carpentry and automobile mechanics. Traditional and parental influence affect these choices.

At the tertiary level, female enrolment as a percentage of total enrolment increased from 29 per cent in 1970 to 38 per cent in 1988. The ratio in sub-Saharan Africa in 1988 was 19 per cent compared to 46 per cent in Latin America and the Caribbean (see table IV.3). Gross enrolment ratios for females were persistently lower than for males in all African countries. In the developed countries, 50 per cent of the total enrolment was female in 1988.

Females studying mathematics and the sciences at the tertiary level continued to be low. Within these fields, female enrolments in the natural sciences, medicine and health-related fields are usually between one quarter and one half of the total enrolments world wide. However, mathematics and engineering remained bastions of male domination.

In several countries, deliberate efforts were made to interest girls and in science and technology courses at school and university and in careers in science and technology. 11/

In the developed countries, women still lag behind men in science and technology. 12/ In the United Kingdom, the proportion of women professors in the sciences at universities in 1990 was 1.9 per cent in the biological sciences; 1.3 per cent in the physical sciences; 0.8 per cent in mathematics; and 0.7 per cent in engineering. The proportion of female teaching staff at universities decreased as one went up the academic ladder from lectureship to professorship. For example, in chemistry, whereas female lecturers made up 13.2 per cent of all lecturers, they constituted 1.6 per cent of readers and zero per cent of professors in 1990. In computer sciences, female lecturers made up 13.5 per cent of the lecturer corps, 6.8 per cent of readers and zero per cent of professors. Similar patterns repeat themselves in France and Germany. In Japan, only 8 per cent of all scientists and engineers in 1991 were women.

Factors responsible for such lags have been identified as societal attitudes and prejudices, poor career prospects and significant salary differentials between men and women of equal background. The Government and academic societies in the United Kingdom made efforts to interest women in studying the sciences. These efforts showed results in engineering as the proportion of women in that field at colleges and universities rose from 7 per cent in 1984 to 15 per cent in 1990.

The proportion of women in 1991 who were directors at leading national research institutes in France was higher than elsewhere. At the Centre national de la recherche scientifique, the proportion of women research directors in various disciplines was as follows: 37 per cent in life sciences; 12 per cent in physics; 16 per cent in mathematics; 9 per cent in engineering; 20 per cent in chemistry; and 24 per cent in astronomy and earth sciences. At the Institut de la santé et de la recherche medicale, 38 per cent of all research directors were women. At the Pasteur Institute women made up about 12 per cent of all directors, in 1991.

Women face discriminatory practices in careers in science and technology in both universities and industry. Dozens of female mathematicians reported having encountered a climate of hostility on their way to professional success. 13/

There also was the double burden of being a female scientist and a wife and mother in a society that expects women, but not men, to put family ahead of career. Women scientists also had difficulty finding senior scientists who could guide their research in their initial years to career success. Women in industry earned less than men. In 1991, women chemists earned, on average, 88 per cent of what their male counterparts earned, even when controlled for age, experience and academic degrees. Women in science in universities earned less than men at every stage of their scientific careers, and the disparity increased at the highest levels of experience. 14/

## D. Diversification of education

Given the importance of mathematics and science and related disciplines to skill formation, research and the growth of productivity, two central concerns in education policy were the increased enrolment of students in these fields and the promotion of vocational education. The distribution of countries by the proportion of students at the tertiary level in science courses is shown in table IV.6. In 1988, about 90 per cent of students enrolled in secondary education in the developing countries were in general education compared with 75 per cent in the developed countries. The highest percentage was in Asia (93 per cent). In Latin America and the Caribbean, however, the percentage of students in general education was lower than in all other groups including the developed countries. Enrolment in technical and vocational education in the developing countries remained low and was actually slightly lower in 1988 than in 1965. In sub-Saharan Africa, the percentage more than halved; it declined in Asia and rose slightly in the Arab States (see table IV.7).

Problems of maintaining the required balance between vocational and general purpose tertiary education continued in all countries. In many developing countries, most students in the tertiary education are enrolled in the humanities, law and the social and behavioural sciences. 15/ Towards the end of the 1980s, there were some significant changes. Commercial and business administration became a distinctly separate and more significant discipline of study in several developed countries. In many countries, the percentage of students enrolled in that discipline increased. In 31 out of 57 developing countries and 10 out of 17 developed countries the proportion of students enrolled in commercial and business administration increased during the 1980s. In Algeria, Angola, Burkina Faso, Burundi, Côte d'Ivoire, Kenya, Liberia, Mali, Mauritius, Morocco, Mozambique, Nigeria, Senegal, Argentina, Barbados, Colombia, Guyana, Nicaragua, Trinidad and Tobago, China, Jordan, Kuwait, Pakistan, Saudi Arabia and Yemen the proportion of students in tertiary education in mathematics, science and science-related professions increased. 16/

### Table IV.6. Distribution of countries by proportion of students at the tertiary level enrolled in science courses, a/ around 1988

| Less than 30 per cent | 30-39 per cent | 40-49 per cent | 50-59 per cent | 60 per cent and above |
|---|---|---|---|---|
| | | **A. Developing countries** | | |
| Benin | Burkina Faso | Ethiopia | Algeria | Angola |
| Botswana | Burundi | Ghana | United Rep. of Tanzania | Guinea |
| Central African Rep. | Côte d'Ivoire | Kenya | Argentina | Mozambique |
| Congo | Liberia | Madagascar | Bolivia | Trinidad and Tobago |
| Egypt | Mali | Nigeria | Iran (Islamic Republic of) | China |
| Lesotho | Mauritius | Tunisia | Singapore | |
| Malawi | Morocco | Zaire | | |
| Sudan | Niger | Barbados | | |
| Togo | Rwanda | Chile | | |
| Zimbabwe | Senegal | Ecuador | | |
| Brazil | Swaziland | Guyana | | |
| Costa Rica | Uganda | Honduras | | |
| Haiti | Zambia | Mexico | | |
| Jamaica | Colombia | Nicaragua | | |
| Suriname | Cuba | Peru | | |
| Bangladesh | El Salvador | Uruguay | | |
| Indonesia | Panama | Republic of Korea | | |
| Malaysia | Venezuela | Papua New Guinea | | |
| Qatar | Bahrain | Philippines | | |
| Saudi Arabia | India | Sri Lanka | | |
| United Arab Emirates | Iraq | Syrian Arab Rep. | | |
| Yemen | Jordan | | | |
| | Kuwait | | | |
| | | **B. Developed countries** | | |
| Canada | Australia | Belgium | Czechoslovakia | |
| New Zealand | Austria | Germany, Fed. Rep. of | Finland | |
| | Hungary | Italy | German Dem. Rep. | |
| | Japan | Norway | Soviet Union | |
| | Netherlands | Poland | Yugoslavia | |
| | Turkey | Sweden | | |
| | | Switzerland | | |
| | | United Kingdom | | |

Source: United Nations/DESD, based on UNESCO, Statistical Yearbook, 1990 (Paris), table 3.12.

a/ In mathematics, science and science-related professional courses, see footnote 15.

Table IV.7. Second level of education: distribution of students among the three main categories, 1965, 1980 and 1988

(Percentage)

| | General education | | | Teacher training | | | Vocational and technical | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1965 | 1980 | 1988 | 1965 | 1980 | 1988 | 1965 | 1980 | 1988 |
| Developing countries | 87.9 | 91.4 | 89.7 | 2.9 | 1.5 | 1.3 | 9.2 | 7.1 | 9.0 |
| Africa (excluding Arab States) | 77.6 | 87.0 | 88.4 | 8.2 | 7.4 | 5.3 | 14.2 | 5.6 | 6.3 |
| Asia (excluding Arab States) | 90.5 | 94.2 | 92.5 | 0.7 | 0.7 | 0.6 | 8.7 | 5.1 | 6.9 |
| Arab States | 85.8 | 87.5 | 87.2 | 3.7 | 1.8 | 1.7 | 10.5 | 10.7 | 11.1 |
| Latin America and Caribbean | 67.4 | 72.4 | 73.7 | 8.9 | 4.1 | 3.2 | 23.7 | 23.5 | 23.0 |
| Developed countries | 79.8 | 77.5 | 75.3 | 1.1 | 0.6 | 0.6 | 19.1 | 21.8 | 24.1 |
| World | 83.0 | 87.0 | 85.8 | 1.8 | 1.2 | 1.1 | 15.1 | 11.8 | 13.0 |

Source: UNESCO, Statistical Yearbook, 1982, table 2.9, and 1990, table 2.9.

## E. Reforms and innovations

Among the more significant changes in education were changes in curriculum at all levels in most countries. These changes responded for the most part to the need to bring learning in schools closer to work experience and to integrate science and technology into the new curriculum.

The irrelevance of school curricula and programmes to economic life, particularly in rural areas and urban slums, in the developing countries was emphasized. The curriculum was often more suitable for students who would eventually go to university, whereas most pupils would have primary education as their only formal education and would likely follow agricultural pursuits. Moreover, a significant proportion of them would drop out even before completing primary education.

In the reformed curricula greater emphasis was placed on mathematics, science and technology. At the primary level, the revised curricula incorporated as much science and mathematics as the pupils would need in practical, real-life situations. The reformed science curricula were integrated and interdisciplinary in approach. They emphasized skills that pupils would use to solve problems related to water resources, sanitation, health and nutrition, and food preservation, to organize productive activities, such as cooperatives for farmers or fishermen, and to improve simple technology for making such things as charcoal, fish nets and fish pens. The reformed curricula linked science with the practical problems and basic technical skills needed for productive work where the pupils lived.

In the Caribbean, pride of place was given to food and nutrition education in the reformed curricula. Food and nutrition concepts and their relationship to science, social studies and physical education were emphasized. A handbook based on this integrated approach was prepared for use by primary-school teachers throughout the English-speaking Caribbean.

In the Philippines, 17/ the Institute for Science and Mathematics Education of the University of the Philippines developed curricula related to the living conditions of the people, for example, the health aspects of drinking-water sources, sewage disposal and food contamination, and these were used in primary-school health and science classes. The Institute also involved pupils and teachers in the development of teaching material linking familiar indigenous techniques to basic principles of science. These techniques included the making of balaw-balaw (shrimp fermented in salt and cooked in rice), the processing of papaya and vegetable farming. The pupils were also taught simple marketing techniques, such as interviewing producers (farmers and balaw-balaw makers), market surveys and rudimentary profitability analysis.

In Fiji, the Curriculum Development Unit of the Department of Education sought to integrate principles of modern scientific agriculture with techniques of production prevalent in the country. In Venezuela, the National Science Teaching Improvement Centre developed materials for a chapter on agriculture teaching soil erosion from the perspectives of climatology, geology, soil science and ecology. In the Dominican Republic, curricula at all levels of education were revised so that students could be better prepared for careers in productive activity and the professions.

At the secondary level, the development of practical skills was stressed in revising curricula. The Thai Community Secondary School Project, the Malaysian Living Skills course and the Papua New Guinea School Community's Extension Project had such objectives in view. The barangay high schools in the Philippines and vocational high schools in China involved the school directly in the production process, in making technical and ethical decisions about alternative technologies and in implementing new ideas and methods to solve human and environmental problems. 18/

In Kenya, curriculum reforms stressed the development of basic skills and knowledge relevant to rural people where most of the pupils live. In Zambia, the agricultural science courses inquired into practical issues with which pupils were familiar. In the United Republic of Tanzania, the Government sought to make all educational programmes relevant to the needs of village life. In Botswana, Lesotho, Swaziland and Zimbabwe, the new syllabuses were drawn up by science panels made up of teachers, education officers from the Ministry of Education and university professors. The new integrated science curricula emphasized science as a means of developing self-reliance and of preparing children for useful, productive lives in the adult world. 19/

The curriculum reforms encountered some impediments. In some developing countries, parents in rural areas objected to the rural bias in primary-school curricula. They feared that the new curricula would confine their children to rural life and limit their chances of entry into the next level of schooling and into the modern sector, where wages and salaries are higher.

In most developing countries, while there were rapid increases in enrolment in vocational and technical institutions, the provision of essential inputs, for example, workshops and materials, did not increase simultaneously. For instance, in Algeria, Egypt and Morocco, the rapid increase in enrolment in vocational and technical institutions during the 1980s was not accompanied by a commensurate increase in equipment, consumable materials, instructional materials, well-trained instructors and efficient management. 20/ Budgetary constraints made it difficult for them to provide these necessary inputs, contributing to a deterioration in the quality of training. Stagnation or recession in economies adversely affected the demand for skilled labour, causing unemployment among the graduates of vocational and technical schools in these three North African countries.

In the developed countries, curriculum changes were sought to ensure that pathways for development were not overly restrictive, preparing students only for entry into higher education or leading to a dead end that did not allow even lateral movement into another track. 21/ Towards the end of the 1980s, Governments in France, Japan and the United Kingdom, set up committees to establish guidelines for the reform of school curricula.

In Bulgaria, under the aegis of the Research Group on Education at the Ministry of Public Education and the Bulgarian Academy of Sciences, Bulgarian schools, from the primary level up, carried out an experiment in the use of revised curricula and new teaching methods based on the integrated approach to learning in the sciences. Science was no longer compartmentalized into biology, chemistry, physics and earth sciences; their interrelationships were brought out in revised textbooks and in classroom teaching.

In some countries, there were efforts to make technology an integral part of general education for all children. In France, a new programme of technology education, which included electronics, informatics, mechanics and nutrition, replaced manual and technical subjects in secondary schools as from the mid-1980s. In the United Kingdom, technology was accorded a prominent place in the 10-year programme of technical and vocational education for all 14- to 18-year-olds. In Scotland, a trial programme was conducted in the mid-1980s, in primary schools, in the hope that a technology problem-solving attitude would contribute to the children's general education and would stand them in good stead in later life. 22/

Some developed countries tried to diffuse science and technology knowledge among students by forging school-industry links. These links related classroom studies to the world of work and employment. They gave the students opportunities for training in a real workplace and increasing their knowledge and practical experience.

In the United States, cooperative education programmes for secondary school and college students combined classroom instruction with work experience and on-the-job training related to students' career goals. These programmes were beneficial to both the participating students and the enterprises. They improved workforce preparation and facilitated youth's transition from school to work. Employers gained access to a pre-screened pool of employees. 23/ During the 1989-1990 school year, about 430,000, about 8 per cent of eligible secondary school students in their third and fourth years, enrolled themselves in the cooperative education programmes. To encourage greater student participation, the Departments of Education and Labour developed specific industry-recognized skill standards and certification of the mastery of these skills.

In Finland, 24/ visits by secondary-school students in physics and chemistry to obtain hands-on experience at a plant, through student-centred work, has proved to be very successful. After initial trials, the Government extended the programme to the entire educational system and links between schools and local industry have been strengthened. These visits received the enthusiastic support of Government, industry, teachers and students alike. Industry was happy about good public relations and good exposure for the quality of its products. The teachers thought the visits were worthwhile. From the students' perspective, practical work that showed them the relationship between school physics and chemistry and industrial processes was exhilarating as the practical value of their studies and experiments at school came to be confirmed. Some of the students found summer jobs at the plants they visited and a few even decided to make a career in those fields.

In France, the Centre national de la recherche scientifique, under its catchword "A Thousand Classes - A Thousand Researchers", sought to establish relations between researchers and young people, especially students. The twinning of laboratories and volunteer researchers with classes in secondary schools, joint projects and small exhibitions brought students in contact with living research.

## F. Educational inputs

Constraints on the availability of resources imposed by the general economic downturn and problems of public finance, in particular, limited opportunities to improve the quality of education. In primary schools, in 1988, the pupil/teacher ratio was more than 31 to 1 in about 60 developing countries. In contrast, in 27 developed countries, the comparable ratio was 20 to 1. Most developing countries with a ratio higher than 31 to 1 were in Africa, Asia and the Arab States (see table IV.8).

Teachers were not only overburdened but also often inadequately trained, lowly paid and poor in morale. In most developing countries, primary teachers had only about nine years of general education and were generally the least able of their classmates. Deficiencies in the trainees' general education necessitated extra costs on remedial programmes. Poor working conditions, including low salaries, resulted in high rates of turnover and absenteeism as some teachers (and civil servants in general) engaged in other activities to earn extra income. In many developing countries, average teacher salaries decreased over the past two decades. The fall has been estimated at 30 per cent in West African countries and 20 per cent in East African countries between 1970 and 1990. 25/ In many instances teachers were paid later than when due. It is also useful to recall that students themselves were hungry and malnourished, making it extremely difficult to get the best of educational opportunities.

**Table IV.8. Pupil/teacher ratio at the primary level, 1970, 1980 and 1988**

| Region | | Number of countries with pupil/teacher ratio of | | | | | |
|---|---|---|---|---|---|---|---|
| | | 20 and under | 21-30 | 31-40 | 41-50 | 51-60 | over 60 |
| Developing countries | 1970 | 11 | 53 | 48 | 28 | 7 | 5 |
| | 1980 | 27 | 52 | 44 | 19 | 8 | 5 |
| | 1988 | 28 | 60 | 41 | 12 | 7 | 7 |
| Africa (excluding Arab States) | 1970 | 1 | 4 | 15 | 17 | 3 | 5 |
| | 1980 | 2 | 6 | 13 | 12 | 5 | 5 |
| | 1988 | 2 | 7 | 19 | 3 | 5 | 7 |
| Asia (excluding Arab States) | 1970 | 2 | 12 | 6 | 6 | 1 | - |
| | 1980 | 2 | 11 | 10 | 3 | 3 | - |
| | 1988 | 3 | 11 | 9 | 4 | 2 | - |
| Arab States | 1970 | 2 | 8 | 8 | 2 | 1 | - |
| | 1980 | 6 | 5 | 9 | 1 | - | - |
| | 1988 | 6 | 11 | 1 | 3 | - | - |
| Latin America and Caribbean | 1970 | 4 | 17 | 17 | 4 | 2 | - |
| | 1980 | 10 | 20 | 11 | 3 | - | - |
| | 1988 | 9 | 22 | 11 | 2 | - | - |
| Developed countries | 1970 | 12 | 24 | 3 | 1 | - | - |
| | 1980 | 23 | 15 | - | - | - | - |
| | 1988 | 27 | 11 | - | - | - | - |
| World | 1970 | 23 | 77 | 51 | 29 | 7 | 5 |
| | 1980 | 50 | 67 | 44 | 19 | 8 | 5 |
| | 1988 | 55 | 71 | 41 | 12 | 7 | 7 |

Source: UNESCO, Statistical Yearbook, 1982, table 2.7 A and 1990, table 2.7.

## G. Books, newspapers, radio and television

During the two decades ending in 1990, there was a phenomenal expansion worldwide in the supply of books, newspapers and films and both radio and television receivers (see table IV.9). Globally, the number of book titles published increased from an estimated 521,000 in 1970 to 834,500 in 1988. The circulation of daily newspapers increased from 395 million in 1973 to 575 million in 1988. However, newspaper circulation per 1,000 inhabitants declined from 129 to 113. The seating capacity of fixed cinemas expanded from 72 million in 1970 to 81 million in 1987. So did annual cinema attendance, which rose from 13.3 billion in 1970 to 14.2 billion in 1987. The number of radio broadcasting receivers more than doubled, from 735 million in 1970 to 1.9 billion in 1988. Radio receivers per 1,000 inhabitants also almost doubled in number, rising from 197 in 1970 to 370 in 1988. The total number of television receivers rose from 290 million in 1970 to 756 million in 1988, while receivers per 1,000 inhabitants almost doubled from 79 in 1970 to 148 in 1988.

The wider availability of books and newspapers and radio and television receivers made the task of combating illiteracy easier around the globe. They were used in the developed countries as well as in the developing countries to impart knowledge in both formal and non-formal education programmes.

## Table IV.9. Availability and use of books, newspapers, cinemas, radio, television and libraries

| Region | Number of books published (Per million inhabitants) | | Number of daily newspapers (Per 1,000 inhabitants) | | | Annual cinema attendance (Millions) | | | Radio receivers (Per 1,000 inhabitants) | | Television receivers (Per 1,000 inhabitants) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1980 | 1988 | 1973 | 1982 | 1988 | 1970 | 1980 | 1987 | 1980 | 1988 | 1980 | 1988 |
| Developing countries | 44 | 57 | 26 a/ | 40 | 43 | 4 660 | 5 400 | 7 670 | 93 | 173 | 23 | 44 |
| Africa (excluding Arab States) | 25 | 20 | 10 | 13 | 14 | 90 | 160 | 210 | 86 | 142 | 9.7 | 14 |
| Asia (excluding Arab States) | 54 | 68 | 62 a/ | 62 | 64 | 3 320 | 4 030 | 6 610 | 93 | 180 | 35 | 52 |
| Arab States | 39 | 32 | 18 | 36 | 32 | 250 | 260 | 200 | 172 | 245 | 60 | 90 |
| Latin America and Caribbean | 119 | 122 | 70 | 86 | 92 | 1 000 | 950 | 650 | 276 | 339 | 109 | 149 |
| Developed countries | 497 | 507 | 313 | 322 | 337 | 8 640 | 7 500 | 6 530 | 861 | 1 008 | 410 | 485 |
| World | 161 | 164 | 129 a/ | 112 | 113 | 13 300 | 12 900 | 14 200 | 292 | 370 | 123 | 148 |

Source: UNESCO, Statistical Yearbook, 1990, tables 6.1, 6.2, 6.5, 6.11.

a/ Not including China, the Democratic People's Republic of Korea and the Democratic Republic of Viet Nam.

## H. Use of communication media in education

The rapid changes in science and technology and their wide spread broadened the role of communication media in education. Newspapers, films, radio, television, computers, satellites and other sophisticated delivery systems, videos and accompanying printed materials were used to produce and distribute teaching materials.

In India, 26/ a satellite television system was used, on an experimental basis, in six States to provide education in health, family planning and agriculture. They received specially made community television sets which were placed in a school or community hall. Daily in-school programmes for children aged 5-12 years were broadcast to schools in the morning. They consisted of entertainment and information intended to enrich the children's school experience and science instruction. An evaluation of the satellite broadcast experiment showed that pupils in classrooms that made use of the broadcasts had gained in comparison with non-participating pupils.

In Nicaragua, radio was used in primary schools to provide instruction in mathematics. The pupils interacted through oral and written exercises, with assistance from classroom teachers, whenever necessary. Pupils in the radio classes scored higher marks than did a control group in other classes.

In the United Republic of Tanzania, the Government used the radio to provide education to illiterate adults, to stimulate national development, to improve health knowledge in rural areas and to promote increased agricultural production and improved nutrition. The radio programmes were deemed to have achieved most of their objectives.

## CONCLUSIONS

The expansion of primary education and the diversification of secondary and tertiary education remain the most important objectives of education policy in most countries. It is especially important to provide females with increased access to education. Fast technological changes and the compelling necessity to raise productivity underlie the need for diversification. Greater emphasis on mathematics and science at all levels and closer ties between formal education and workplaces form other aspects of the process of diversification.

A scarcity of resources in the developing countries, especially in Africa and Latin America and the Caribbean, slowed down progress in the education sector. The diversion of public sector expenditure to debt-servicing, military and other purposes reduced resources for education, as well as other social services. However, there was much room for shifting resources among levels of education to give higher priority to primary education.

Efficiency in the management of educational institutions was of much concern in the developed countries. In several countries, measures were taken to make educational institutions compete for resources from students, so that those less efficient would have clear incentives to improve the quality of their services. These policies have run up against two major problems. The first is the desire on the part of workers in the education sector, mostly teachers, to avoid the uncertainty that is a concomitant of competition. The second is the problem of equity, where knowledgeable parents and teachers would teach more able students well, while neglecting other institutions and students.

Educational reforms attracted considerable attention in both developed and developing countries. This process is likely to continue well into the decade.

## Notes

1/ Inter-Agency Commission for the World Conference on Education for All, World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs (New York, April 1990), preamble, p. 1.

2/ See Suren Gajraj and F. Tandart, "Education for all and the literacy benchmark", in International Institute for Educational Planning (IIEP), Newsletter, vol. X, No. 2 (April-June 1992), pp. 9-10.

3/ See UNESCO, Statistical Yearbook, 1990 (Paris, 1990), tables 3.2 and 3.11.

4/ Ibid., table 4.3.

5/ An illiterate person is one "who cannot with understanding both read and write a short, simple statement on his/her everyday life". UNESCO, Compendium of Statistics on Illiteracy, 1990 edition, No. 31 (Paris, 1990), p. 2.

6/ For details, see John C. Cairns, "Lessons from past literacy campaigns: a critical assessment", Prospects: Quarterly Review of Education, vol. XIX, No. 4 (Paris, UNESCO, 1989), p. 555.

7/ See Exemplary Adult Literacy Programs and Innovative Practices in Canada, Province of British Columbia, Ministry of Advanced Education and Job Training and Ministry Responsible for Science and Technology (Victoria, B.C., Canada, 1989).

8/ See John C. Cairns, loc. cit., p. 554.

9/ See Yu Bo and Xu Hong Yan, Adult Higher Education, A Case Study on the Workers' Colleges in the People's Republic of China (Paris, UNESCO, International Institute for Educational Planning, 1988).

10/ Audrey M. Thomas, "The social and economic costs of illiteracy", Prospects: Quarterly Review of Education, vol. XIX, No. 4 (Paris, UNESCO, 1989), p. 539.

11/ For details of the approach in Sweden, see Ingrid Grantsam, "Girls and women in science and technology education", in D. Layton, ed. Innovations in Science and Technology Education, vol. II (Paris, UNESCO, 1988), pp. 47-58.

## Notes (continued)

12/ The data are from "Data points. Where women get their Ph.Ds., *Science*, vol. 255, No. 5050 (Washington, D.C., American Association for the Advancement of Science, 13 March 1992), p. 1376.

13/ Paul Selvin, "Profile of a field: mathematics. Heroism is still the norm", *Science* ..., p. 1382.

14/ See note 12.

15/ The composition of these fields of study, according to the International Standard Classification of Education of UNESCO, are:

*Education Science and Teacher Training*: General teacher training and specialized training in vocational subjects.

*Humanities, Religion and Theology*: Languages and literature, linguistics, programmes for interpreters and translators, history, archaeology, philosphy, religion and theology.

*Fine and Applied Arts*: Art studies, painting, sculpturing, handicrafts, music, drama, photography and interior design.

*Law*: Law, programmes for "notarie", local magistrates.

*Social and Behavioural Science*: Social and behavioural science, economics, demography, political science, sociology, anthropology, psychology, geography, studies of regional cultures.

*Commercial and Business Administration*: Business, public and institutional administration; commercial and secretarial programmes; accountancy, business machine operation and electronic data processing; financial management.

*Mass Communication and Documentation*: Journalism, radio and television broadcasting, public relations, communications arts, library science, museum and documentation techniques.

*Home Economics (Domestic Science)*: Household arts, consumer food research and nutrition.

*Science Trades*: Cooking (restaurant-type), retailing, tourist trades.

*Natural Science*: Biology, chemistry, physics, astronomy, meteorology, geology, oceanography.

*Mathematics and Computer Science*: Mathematics, statistics, actuarial and computer sciences.

*Medical Science and Health-related*: Medicine, surgery and medical specialities, hygiene, public health, physiotherapy, occupational therapy, diagnostic treatment techniques, medical technology, dentistry, stomatology, odontology, pharmacy, optometry

## *Notes* (continued)

*Engineering*: Chemical, civil, mechanical, industrial, metallurgical, mining, electrical and electronics engineering; surveying; agricultural, forestry and fishery engineering techniques.

*Architecture and Town Planning*: Architecture, town planning, landscaping.

*Trade, Craft and Industrial Programmes*: Food processing, electrical, electronics, metal; mechanical and air-conditioning trades; textile techniques, laboratory technicians, graphic arts, optical lens making.

*Transport and Communications*: Air crew and ships' officer programmes, railway operating trades, road motor vehicle operating programmes, postal service programmes.

*Agriculture, Forestry and Fishery*: Agriculture, animal husbandry, horticulture, crop husbandry, agricultural economics, food science and technology, soil and water sciences, veterinary medicine, forestry, forest products technology, fishery science and technology.

*Other Programmes*: Criminology, civil security and military programmes, social welfare, vocational counselling, physical education, environmental studies, nautical science.

16/ See UNESCO, *Statistical Yearbook, 1990* (Paris), table 3.12.

17/ This section is based on Porfirio P. Jesuitas, "Science and technology education for living", in D. Layton, op. cit., pp. 167-178.

18/ Colin Power, "New methods for training and retraining science and technology teachers", in D. Layton, op. cit., p. 292.

19/ Jakes Swartland, "Interdisciplinarity in the teaching of science during the first nine to ten years of basic education", in D. Layton, op. cit., p. 95.

20/ J. Salmi, "Vocational education in Algeria, Egypt and Morocco", *Prospects: Quarterly Review of Education*, vol. XX, No. 1 (Paris, UNESCO, 1990), p. 98.

21/ For the proceedings of the Conference, see Organization for Economic Cooperation and Development, *Education and the Economy in a Changing Society* (Paris, 1989), p. 97.

22/ George Mills, "An introduction to technology in the early years of schooling", in D. Layton, op. cit., p. 42.

23/ United States General Accounting Office, *Transition from School to Work: Linking Education and Worksite Training*, Report to Congressional Requesters (Washington, D.C., August 1991), (GAO/HRD-91-105), p. 3.

24/ For details, see H. Kuitunen and V. Meisalo, "Science and technology education and industry", in D. Layton, op. cit., pp. 141-154.

## Notes (continued)

25/ World Bank, Primary Education, World Bank Policy Paper (Washington, D.C., 1990), p. 24.

26/ Data on India, Nicaragua, the United Republic of Tanzania and the Dominican Republic are based on Emile G. McAnany and John K. Mayo, "Communication media in education for low-income countries: implications for planning", Fundamentals of Educational Planning, No. 29 (Paris, UNESCO, IIEP, 1980), pp. 20-52.

# Chapter V

# HOUSING AND SANITATION

Housing conditions in most countries have deteriorated in recent years. High real interest rates have discouraged the construction of houses. Governments with budgetary restrictions have been more restrained in investments in the housing sector than earlier. Demand for housing has become weaker as real income growth slowed. The deterioration in housing conditions has been particularly evident in the heavily indebted developing countries, with high inflation and compressed import capacity keeping out the import of building materials. It has also emerged as a critical social issue in the economies in transition. Investment in housing has slowed in the developed market-economy countries more as a result of demographic trends than of economic stagnation, where housing the poor has emerged as a significant problem.

## A. Developing countries

The shortage of housing has been a major social concern in the developing countries experiencing rapid urbanization (see chap. I). Rapid urbanization has caused urban land and housing prices to rise dramatically. Uncontrolled settlements have grown and overcrowding has reached serious proportions. Drinking water supplies, sanitation and other critical public services have been tested beyond their limits. The pressure on cities has also contributed to environmental degradation. 1/

The urban housing data normally available are limited to the stock of standard authorized dwelling units built on land, with clear title, that comply with building codes and have indoor piped water and sanitation. However, much of the urban population lives in substandard housing. Generally, one in every four newly formed households has access to standard authorized housing. The construction of standard dwelling units per capita varies among countries at comparable levels of development and per capita income (see table V.I). Yet, there is a strong correlation with income. On average, nine new households were formed for each new standard dwelling built in the low-income developing countries during the 1980s and two new households for each new standard dwelling built in the middle-income developing countries. Because households are larger in the developing countries than in the developed countries, there are more people per habitable room in the former than in the latter (see table V.2): 1.9 persons in the developing countries compared with 0.9 in the developed countries. Three out of four households in Kumasi, Ghana, one out of two in Calcutta and one out of three in Mexico City live in one-room accommodations. 2/ In the worst of cases, tenement densities have reached the point where one-room dwellings have been split up into units in which several households live simultaneously or alternate with one another in day-and-night shifts. 3/

## Table V.1. New standard dwellings completed in developing countries, 1980-1990

(per 1,000 inhabitants)

| Country | 1980 | 1985 | 1990 |
|---|---|---|---|
| Argentina | .. | 3.9 | 3.8 |
| Chile | 3.9 | 3.5 | 5.0 |
| Costa Rica | 5.5 | 4.7 | .. |
| Ecuador | 1.7 | 1.7 | .. |
| El Salvador | 0.7 | 1.9 | .. |
| Fiji | 1.4 | 0.8 | 0.3 |
| Jordan | 2.4 | 2.0 | .. |
| Kenya | 0.1 | 0.0 | .. |
| Morocco | 1.9 | 1.8 | .. |
| Panama | 0.6 | 0.9 | .. |
| Republic of Korea | 5.5 | 5.5 | .. |
| Singapore | 8.7 | 33.0 | .. |
| Syrian Arab Republic | 4.7 | 1.7 | .. |
| Trinidad and Tobago | 3.3 | 2.6 | .. |
| Turkey | 3.2 | 1.9 | .. |
| Venezuela | 2.3 | 1.1 | .. |

Sources: United Nations, Monthly Bulletin of Statistics, September 1992; Construction Statistics Yearbook, 1984 (United Nations publication, Sales No. E.86.XVII.20).

Table V.2. Average number of persons per room in occupied dwellings in urban areas, in developing countries, 1960-1980

| Country | Around 1960 | | Around 1970 | | Around 1980 | |
|---|---|---|---|---|---|---|
| | Year | Average | Year | Average | Year | Average |
| Afghanistan | .. | .. | .. | .. | 1979 | 1.9 |
| Argentina | 1960 | 1.3 | 1970 | 1.4 | 1980 | 1.2 |
| Bangladesh | .. | .. | 1973 | 3.1 | .. | .. |
| Brazil | .. | .. | 1970 | 1.0 | 1980 | 1.0 |
| Cameroon | .. | .. | 1976 | 1.2 | .. | .. |
| Chile | 1960 | 1.6 | 1970 | 1.3 | 1980 | 1.0 |
| Colombia | .. | .. | 1973 | 1.6 | 1985 | 1.4 |
| Costa Rica | 1963 | 1.3 | 1973 | 1.4 | 1984 | 1.2 |
| Cuba | .. | .. | 1970 | 1.1 | 1980 | 1.0 |
| Ecuador | 1962 | 2.1 | 1974 | 1.9 | 1982 | 1.3 |
| Guatemala | 1964 | 1.9 | 1973 | 1.6 | 1986 | 2.0 |
| India | 1960 | 2.6 | 1971 | 2.8 | .. | .. |
| Iran (Islamic Republic of) | 1966 | 2.2 | 1976 | 1.8 | .. | .. |
| Libyan Arab Jamahiriya | .. | .. | 1973 | 1.8 | .. | .. |
| Mexico | 1960 | 2.6 | 1970 | 2.2 | 1980 | 2.3 |
| Pakistan | 1960 | 3.1 | 1973 | 2.7 | 1980 | 3.2 |
| Panama | 1960 | 2.1 | 1970 | 1.8 | 1980 | 1.6 |
| Paraguay | 1962 | 2.6 | 1972 | 1.7 | 1982 | 1.6 |
| Peru | 1961 | 2.0 | 1972 | 1.8 | 1981 | 1.8 |
| Philippines | .. | .. | 1970 | 2.1 | .. | .. |
| Republic of Korea | 1960 | 2.8 | 1970 | 2.7 | .. | .. |
| Sri Lanka | 1963 | 2.1 | 1971 | 2.7 | 1981 | 2.3 |
| Tunisia | 1966 | 2.7 | 1975 | 2.6 | .. | .. |
| Uruguay | 1963 | 1.5 | 1975 | 2.1 | 1985 | 1.7 |
| Venezuela | 1961 | 1.6 | 1971 | 1.5 | 1981 | 1.4 |

Sources: Compendium of Human Settlements Statistics, 1983 (United Nations publication, Sales No. E/F.84.XVII.5); Compendium of Housing Statistics, 1975-1977 (United Nations publication, Sales No. E/F.80.XVII.4); UNCHS (Habitat), Global Report on Human Settlements, 1986 (New York, Oxford University Press, 1987); Statistical Yearbook for Latin America and the Caribbean, 1990 edition (United Nations publication, Sales No. E/S.91.II.G.1); and Statistical Yearbook for Asia and the Pacific, 1991 (United Nations publication, Sales No. E/F.92.II.F.1).

Overcrowding in the informal housing stock is due not only to poverty but also to public sector policies of prohibiting unauthorized construction and rent-control legislation which has discouraged new construction. 4/ Substantial declines in government investment in housing further reduced the supply of affordable housing in many countries (see chap. VIII, table VIII.1).

Growth in the informal housing stock has been most pronounced in the principal cities of the developing countries, where it comprises between one third and four fifths of the total urban housing stock. Much of this housing is not durably built, lacks asbestos cement or similar roofing, brick or cement block walls and wood or cement floors. Building materials frequently have to be replaced, posing major problems and inconveniences to the inhabitants.

Because of rising land and construction costs and difficult access to housing credit, there has been a marked shift to rental housing in recent years (see table V.3). The ratio of renting to ownership has grown in most of Latin America and Africa, while trends are ambiguous in Asia. 5/ In Latin America, following decades of rising homeownership made possible by organized squatter invasions and the illegal subdivision and sale of unserviced plots, in the 1980s the proportion of tenant households grew in six countries (see table V.3).

The principal barrier to owner-occupancy for low-income groups has been the remoteness of peripheral undeveloped land from urban centres and the rising costs of commuting to work and school. Rented accommodation also provides better amenities, including piped water, electricity and sanitation. Although initially created by self-help owner/builders, well-located consolidated settlements have developed into extensive rental systems. Owner-occupant landlords resemble their tenants in income and education but are generally older and have had the good fortune of immigrating earlier when urban land was cheaper and more readily available. 6/ As housing prices have risen more rapidly than personal income, recent immigrants have little prospect of becoming homeowners.

In most instances, urban housing in the developing countries is worse than need be because housing markets have functioned poorly. Unrealistically high standards for subdivision, infrastructure and construction have made it impossible to build low-income housing legally in most cities. Mortgage lending, often at subsidized interest rates to finance the construction of expensive high-standard dwellings, has financed no more than 10 to 20 per cent of annual housing investment. Most housing has had to be financed out of household savings and current income and built in stages as funds became available. 7/ Government regulations have also restricted the allocation of inputs, such as serviced land and building materials, raising costs of construction to those who are not entitled to these allocations. 8/

In rural areas, housing is not as pressing a problem as it is in rapidly growing cities. Land is plentiful and the construction of low-cost housing affordable. Pit latrines meet basic sanitation requirements. Rural housing

Table V.3. Renter households as a proportion of total households in urban areas, 1960s-1980s

| Country | 1960s | 1970s | 1980s |
|---|---|---|---|
| Latin America and Caribbean | | | |
| Argentina | 31 | 23 | 29 |
| Bolivia | 47 | 31 | 47 |
| Brazil | .. | 32 | .. |
| Chile | .. | 32 | 36 |
| Colombia | 39 | 41 | .. |
| Dominican Republic | 55 | 42 | .. |
| Ecuador | 56 | 49 | 48 |
| El Salvador | 63 | 52 | .. |
| Guatemala | 41 | 4 | .. |
| Haiti | .. | 47 | .. |
| Honduras | 62 | 51 | .. |
| Jamaica | 76 | 71 | .. |
| Mexico | 62 | 46 | .. |
| Nicaragua | .. | 47 | .. |
| Panama | .. | 53 | 44 |
| Paraguay | 20 | 18 | 28 |
| Peru | 45 | 28 | 48 |
| Uruguay | 51 | 32 | 43 |
| Venezuela | 31 | 23 | .. |
| Africa | | | |
| Cameroon | .. | 53 | .. |
| Congo | 42 | 33 | .. |
| Egypt | 57 | .. | .. |
| Ethiopia | 58 | .. | .. |
| Ghana | .. | 60 | .. |
| Libyan Arab Jamahiriya | .. | 45 | .. |
| Malawi | .. | 60 | 75 |
| Mauritius | 55 | .. | .. |
| Morocco | .. | 63 | .. |
| Nigeria | 81 | .. | .. |
| Seychelles | .. | 63 | .. |
| Tunisia | 33 | 25 | .. |
| United Republic of Tanzania | 63 | .. | .. |
| Zaire | 38 | .. | .. |
| Zambia | 21 | 30 | 65 |
| Zimbabwe | 48 | .. | .. |

Table V.3 (continued)

| Country | 1960s | 1970s | 1980s |
|---|---|---|---|
| Asia | | | |
| Bahrain | .. | 46 | .. |
| Bangladesh | .. | .. | 40 |
| Fiji | .. | .. | 23 |
| India | 54 | 53 | .. |
| Indonesia | .. | 41 | .. |
| Iran (Islamic Republic of) | 45 | 42 | .. |
| Jordan | 63 | .. | .. |
| Pakistan | 51 | 35 | 32 |
| Philippines | 26 | 36 | .. |
| Republic of Korea | 39 | 24 | 57 |
| Singapore | 88 | .. | 45 |
| Sri Lanka | 59 | 52 | 42 |
| Syrian Arab Republic | .. | 32 | .. |
| Thailand | 61 | 52 | 46 |

Sources: Statistical Yearbook for Latin America and the Caribbean, 1990 edition (United Nations publication, Sales No. E/S.91.II.G.1); Statistical Yearbook for Asia and the Pacific, 1991 (United Nations publication, Sales No. E/F.92.II.F.1); Compendium of Housing Statistics, 1975-1977 (United Nations publication, Sales No. E/F.80.XVII.4); UNCHS (Habitat), Global Report on Human Settlements, 1986 (New York, Oxford University Press, 1987); and UNCHS (Habitat), Human Settlements Basic Statistics (HS/176/90A/E/F/S).

has improved where remittances from emigrant workers have been substantial. With the exception of access to potable water, the housing problems of rural areas and slow-growing towns, despite their often substandard quality and overcrowded conditions, are generally not as pressing as those of households in large cities.

## Sanitation

The shortage of infrastructure for providing services has made the price of developed land 10 to 15 times that of undeveloped land. 9/ Simply providing piped water has been found to nearly double the value of otherwise comparable dwellings. 10/ Annual public sector investments in water and sanitation have averaged about 1.5 per cent of GDP, or about 5 per cent of total public expenditure in the developing countries. 11/ Despite general cutbacks in public investment in Latin America during the 1980s, house connections to the urban water supply system rose from 71 per cent in 1980 to 80 per cent at the end of 1990, and dwellings serviced with sewer connections rose from 42 to 50 per cent (see table V.4). 12/ Much of the expanded coverage in Africa and parts of Latin America consisted of minimum-standard

Table V.4. Percentage of population with access to safe water supplies and sanitation facilities

| | | Urban water supply | | Urban sanitation facilities | | | |
|---|---|---|---|---|---|---|---|
| | | House connection | Standpost | Sewer connection | Other | Rural water supplies | Rural sanitation facilities |
| Africa | 1970 | 33 | 33 | 8 | 39 | 13 | 23 |
| | 1980 | 29 | 31 | 11 | 43 | 22 | 20 |
| | 1985 | 33 | 33 | 12 | 59 | 25 | 25 |
| | 1990 | 49 | 20 | 32 | 41 | 32 | 22 |
| Latin America | 1970 | 61 | 15 | 36 | 40 | 24 | 24 |
| | 1980 | 71 | 7 | 42 | 14 | 42 | 20 |
| | 1985 | 71 | 13 | 41 | 39 | 47 | 27 |
| | 1990 | 80 | 11 | 50 | 33 | 52 | 36 |

Source: WHO, "The International Drinking Water Supply and Sanitation Decade: end of the Decade review (as of December 1990)" (WHO/CWS/92.12), table A.3.2.

shared-use services, such as public water taps and communal latrines, in low-income urban and rural settlements. The continued expansion of coverage in the 1980s was made possible in part by high levels of official development assistance (ODA) to finance physical infrastructure. Of some $31 billion invested on sanitation in Latin America, about half was financed from external sources. In Africa, out of $US 13.2 billion, nearly three quarters were obtained from external assistance. 13/

Public water taps are prized in low-income urban settlements since in their absence households must pay up to 15 times the official tariff when buying water from vendors, or must resort to the use of polluted water from shallow wells. However, there have often been problems of long waiting lines, broken or malfunctioning water taps, interruptions in service and the risk of waste water seeping into temporarily empty pipes through cracks, thereby sparking epidemics of water-borne diseases. 14/

As for communal sanitation, suitable solutions for high-density areas have often proved elusive. Public toilets have experienced problems of upkeep, cleanliness and public acceptance, the latter partly a consequence of the first two and partly owing to personal discomfiture. Electricity is more commonly available with legal and illegal home connections. As for rural homes, relatively few are connected to water pipes, sewers or electricity lines, except in major villages and towns.

A major problem in water supply in the developing countries is that of financing and cost recovery. While half the population is still deprived of adequate water supplies, half of all water supplied was unaccounted for or remained unpaid for. New investments were constantly required, while operating incomes were very low. Tariffs were set so low that revenue did not even cover administrative costs, not to mention depreciation. As a result, water systems were not properly maintained and the pace at which they were extended to new settlements fell behind needs. In recent years, as part of the sectoral stabilization and adjustment measures, tariffs have been increased to economic levels. Higher tariffs on households with piped water have helped cross-subsidize the costs of servicing low-income settlements with neighbourhood standpipes.

## B. Developed market-economy countries

Physical indicators of housing conditions in the developed market-economy countries show a generally satisfactory situation in quantitative and qualitative terms. On the whole, a rough parity exists between household and standard dwelling numbers. Aggregate statistics, however, mask differences in social access to adequate housing. Although in many developed market-economy countries virtually the entire population is adequately housed, in countries where social inequality is more pronounced the rich are often "overhoused" in relation to need and the vulnerable poor end up homeless. Since the mid-1970s, moreover, new housing requirements have emerged as the patterns of housing demand shifted towards smaller households and, in some cases, more central locations.

Housing conditions in the market-economy countries have improved markedly over the years. With housing construction outpacing population growth, the scarcity of dwellings that existed at the end of the Second World War was eliminated by the mid-1970s. Household crowding declined markedly (see table V.5). Since the mid-1970s, however, improvements in housing conditions in many countries faltered as incomes failed to keep up with housing prices and various distortions emerged in the housing markets. 15/ The mismatch between supply and demand owing to problems of affordability, tenure and location of the housing stock is pointed up by estimates that there are a half million dwellings, including 250,000 public housing units in the United Kingdom and 10.3 million dwellings in the United States that stand unoccupied, while 1.2 million households stand on waiting lists for public housing in the United Kingdom and 1 million families have their names on waiting lists for public housing in the United States. An additional 12 million are deemed to be in need of assistance to pay rent. 16/ The problem is especially acute with low-income households, unskilled labour and the chronically unemployed. Rent-controlled housing is often occupied by those in higher-income groups. Some of the older housing stock has been rehabilitated and modernized and rented at high prices. 17/ There is an acute shortage of inexpensive rental accommodation, driving up the cost of housing in the unregulated sector.

Table V.5. Number of persons per room, and floor space per person, of occupied dwellings

| Country | No. of persons per room | | | Floor space per person a/ | |
|---|---|---|---|---|---|
| | 1970 | 1980 | 1990 | 1980 | 1990 |
| Austria | 0.9 | 0.6 | 0.6 | 36 | 35 |
| Belgium | 0.6 | 0.5 | 0.5 | 39 | 47 |
| Denmark | 0.8 | .. | .. | .. | .. |
| Finland | 1.0 | .. | .. | 33 | 32 |
| France | 1.3 | 0.7 | .. | .. | .. |
| Germany | 1.5 | 0.6 | 0.5 | 41 | 41 |
| Ireland | 0.9 | 0.6 | 0.6 | 23 | 22 |
| Italy | 0.9 | 0.7 | .. | 28 | .. |
| Norway | 0.7 | .. | 0.6 | 36 | 46 |
| Sweden | 0.7 | 0.4 | 0.5 | 51 | 54 |
| United Kingdom | 0.6 | 0.6 | 0.6 | .. | .. |
| United States | 0.6 | .. | .. | 62 | 62 |

Sources: Annual Bulletin of Housing and Building Statistics for Europe (United Nations publication, Sales No. E/F/R.91.II.E.11); UNCHS (Habitat), Global Report on Human Settlements, 1986 (New York, Oxford University Press, 1987); and Compendium of Housing Statistics, 1975-1977 (United Nations publication, Sales No. E/F.80.XVII.4).

a/ Square metres.

Homelessness has grown rapidly in some countries during the past decade as a result of insufficient new public housing construction, long-term unemployment, the growth of drug abuse and, in the case of Italy and the United States, the de-institutionalization of many mentally ill persons from hospitals without adequate out-patient follow-up treatment. In the United States, low-income rental units have disappeared at the rate of half a million a year, there has been little new construction of public housing and government housing allowances have failed to keep pace with rising rents. 18/ Reliable data on homelessness are lacking in all countries, with estimates in the United States ranging from 250,000 to 3 million, 19/ which complicates the analysis of the problems of homelessness. Generally, countries with adequate public housing and comprehensive social assistance programmes have had few, if any, problems of homelessness.

Public policies to deal with housing needs have included various mixes of subsidies and the construction of dwellings. In the 1980s, housing capital expenditure and operating subsidies ranged from 0.1 per cent to 8.2 per cent of central government outlays, with a mode close to 4 per cent. 20/ The composition of those outlays, however, shifted over the years from the construction of dwellings to transfer payments to support poorer households. The reasons for this change include the large stock of public housing in a number of countries, 21/ high real interest rates and a growing disillusionment in some countries about the effectiveness of public housing in solving the residential needs of low-income groups. Instead, the focus of policy intervention has been to regulate rents, protect the rights of tenants, provide rent subsidies for poor tenants in non-rent-controlled premises and assist private lessors by means of tax incentives and public subsidies for new construction. 22/ Public sector subsidies, as a result, are increasingly made up of rent support transfer payments to poorer households and of various forms of support to low-income housing landlords. 23/

Rent supplements have gained recognition for the advantages they provide over other housing policy approaches: they are more effectively targeted at needy people than rent controls or tax relief, less costly per beneficiary than public housing construction and more flexible with respect to site, mobility and shifting housing needs than other policy approaches. The impetus for the adoption of rent supplements in Germany came from the need to ease the financial strain on lower-income families after rent decontrol. 24/ Rent-control regulations continue to be controversial in many countries because they deter new construction, discourage maintenance and repair of the housing stock, induce owners to keep vacant premises off the rental market, 25/ discourage labour mobility from economically depressed areas to cities where employment prospects are brighter 26/ and impede the filtering-down of older housing from well-off occupants of rent-controlled premises to poorer newcomers in need of shelter. 27/

Subsidies to home-owners resulting from deducting the cost of mortgage interest payments from taxable income rose in the early 1980s when interest rates and inflation and housing costs all rose. At their peak, these implicit subsidies came to approximately 50 per cent of the total fiscal subsidy in the housing sector in France, Germany and the United Kingdom. 28/ They encouraged overconsumption of housing by the wealthy and benefited existing home-owners and sellers at the expense of first-time buyers by bidding up housing prices more than would have occurred in their absence. They have declined more recently in some countries. Tax codes have placed caps on mortgage interest relief, restricted tax concessions to first-time purchasers during the first several years of the loan or lowered the effective tax brackets at which households may claim deductions. 29/ While recent reforms have helped reduce the deadweight losses resulting from the favourable tax treatment of homeownership, they have not in all cases made the incidence of mortgage interest subsidies less regressive. 30/

Homeownership includes the prospect of the value of the housing unit rising and the risk of it falling. In countries where housing prices outpaced inflation, home-owners obtained substantial windfall gains when selling their homes. Moreover, given the surge in housing prices in Japan, the United Kingdom, the United States and a number of other countries during the 1980s, home-owners borrowed at record levels, in relation to income. 31/ Since 1990, however, house prices have fallen by 16 per cent on average in real terms. Home-owners worrying about their shrinking wealth and ability to repay what they borrowed contributed to the prolongation of the economic slow-down. 32/ In view of forecasts of the formation of fewer households, real housing prices are expected to continue to stagnate or decline in developed market-economy countries during the course of the 1990s. 33/ The correction downward in house prices has been a boon to first-time home buyers, home-owners wishing to trade up to better housing and tenants.

Future housing requirements are likely to vary from country to country. In countries where there still exists a severe shortage of good quality housing, as in some large cities of the Mediterranean region and Japan, new construction is likely to continue to account for the bulk of housing investment. In others with low population growth and an adequate supply of standard housing, investment in the maintenance and modernization of the existing housing stock is likely to continue growing at a higher rate than new construction. The demand for rental accommodations is likely to increase not only because of stagnating incomes but also as a consequence of demographic and economic changes: fewer children per household, high rates of divorce, occupationally mobile single persons who prefer to rent, prospects of lower price appreciation and the preference of a growing number of elderly persons to consume their capital during retirement rather than tie it up in housing. A return to homeownership trends, however, cannot be precluded in countries where "baby boomers" are reaching the peak age in their life and work cycles when households are most likely to be owner-occupants. 34/

As with housing production, investments in new or larger capacity sewers and water mains declined after the 1970s. Except in Japan, where the expansion of urban infrastructure is an urgent priority, public expenditure on infrastructure in the developed market-economy countries has been directed mainly at improving or repairing urban water and sewage systems. 35/ Environmental concerns, such as the contamination of potable water supplies by surface water run-off and the effluent from waste-water treatment processes, are likely in future years to contribute to a growing sense of urgency to repair existing water and sewage systems. 36/

## C. Economies in transition

Under socialism and central planning, countries adopted the principle that housing was a social right which the State had the duty to supply to all who needed it. On average, the centrally planned economy countries invested up to 5 or 6 per cent of net material product in housing construction in response to rapid urbanization and industrialization, and the need to replace substandard housing and the stock destroyed by the War. As a consequence, by the mid-1980s, over 85 per cent of the population of the Soviet Union lived in accommodations built after the Second World War, as did about two thirds of the population of Hungary and more than half in Czechoslovakia. 37/ The provision of ancillary infrastructure also improved during the post-War period. Eighty-nine per cent of the urban housing stock of the Soviet Union was equipped with fixed lavatories and central heating by 1985. 38/ However, residential accommodations remained in short supply in the region, as reflected in long waiting lists for housing, overcrowding (see table V.6) and the difficulties of relocating in accordance with social preferences relating to life-cycle needs and labour market changes. 39/ The average floor space per resident in these economies is less than half the average in developed market-economy countries. Further evidence of the scarcity of adequate housing in Russia was the delay in repatriating troops stationed in other member countries of the Warsaw Pact.

### Table V.6. Housing conditions in Eastern Europe and the former Soviet Union, 1980-1990

| Country | Ratio of new dwellings built to total marriages and divorces 1985 | Floor space per person (sq m) 1985 | Dwellings completed per 1,000 inhabitants 1980 | 1990 | Total housing stock per 1,000 inhabitants 1985 | Share of housing in household expenditure, mid-1980s, including utilities |
|---|---|---|---|---|---|---|
| Bulgaria | 0.80 | 19 | 8.4 | 2.9 | 353 | 12.1 |
| Czechoslovakia | 0.66 | 26 | 8.8 | 4.7 | 367 | .. |
| Hungary | 0.71 | 19 | 8.3 | 4.2 | 361 | 8.7 |
| Poland | 0.60 | 15 | 6.1 | 4.0 | 287 | 4.4 |
| Romania | 0.54 | .. | 8.9 | 2.1 | .. | .. |
| USSR | 0.55 | 15 | 7.5 | 7.4 | .. | 2.5 |

Sources: Annual Bulletin of Housing and Building Statistics for Europe (United Nations publication, Sales No. E/F/R.91.II.E.11); Statistichesky ezhegodnik stran-chlenov SEV 1986 (Moscow); and B. Renaud, Housing Reform in Socialist Economies, World Bank Discussion Paper No. 125 (June 1991), table 3.

Past approaches to housing provision have been further criticized for their low productivity and government subsidies on the order of 3 to 5 per cent of net material product, not including subsidies from enterprises and local governments. 40/ Moreover, because of low-quality production and poor finishes, much of the housing stock is currently entering a phase in which maintenance costs are very high and some housing stock may have to be completely replaced. 41/

Recent trends in housing construction show a considerable decline in Eastern Europe, with no signs of recovery in the near term. There has also been a decline in the output of building materials (see table V.7). Owing to economic contraction and shortages of building materials, the housing sector has become a residual concern in most countries. 42/ There is broad agreement in the former centrally planned economy countries that the inefficiencies, distortions and inequities of past housing systems must be reformed. 43/ Rents and utility charges have been raised in Bulgaria, Hungary and Russia. Public sector apartments have been offered to sitting tenants at nominal prices. Similar measures are under active consideration in Poland and Romania. 44/ However, despite low prices, most offers have been rejected because of poor quality and maintenance. The large and well-located apartments rented to, and currently owned by, former high-level officials have been bought up. 45/

Table V.7. Output of building materials and houses in economies in transition

| Country and year | Production of bricks (In millions) | Dwellings completed by: State | Co-ops (In thousands) | Private persons |
|---|---|---|---|---|
| **Bulgaria** | | | | |
| 1980 | 1 491 | 39 | 18 | 18 |
| 1989 | 1 044 | 18 | 8 | 14 |
| **Czechoslovakia** | | | | |
| 1980 | 3 275 | 52 | 50 | 32 |
| 1989 | 3 317 | 28 | 37 | 27 |
| **Hungary** | | | | |
| 1980 | 1 946 | 30 | 4 | 38 |
| 1989 | 1 777 | 5 | 1 | 34 |
| **Poland** | | | | |
| 1980 | 1 738 | 161 | .. | 56 |
| 1989 | 1 082 | 95 | .. | 55 |
| **Romania** | | | | |
| 1980 | 1 423 | 186 | .. | .. |
| 1989 | 537 | 11 | .. | .. |
| **USSR** | | | | |
| 1980 | 41 783 | 1 667 | 90 | 247 |
| 1989 | 30 002 | 1 675 | 134 | 310 |

Source: Annual Bulletin of Housing and Building Statistics for Europe (United Nations publication, Sales No. E/F/R.91.II.E.11).

The challenges to new housing construction in this period of transition are formidable. An entirely new institutional structure has to emerge. Viable housing finance systems are difficult to institute because current household incomes are far too low in relation to housing prices. 46/ High inflation and economic uncertainty make loan maturities too short and interest rates too high. Retail prices of building material are two to three times higher than wholesale prices. 47/ It will be some time before a working housing market emerges.

## D. Conclusions

The housing situation varies considerably among the developing countries, the developed market economies and the economies in transition. However, all countries have a number of problems in common: distortions that raise prices and reduce access to housing, rigidities in access to housing which hinder labour mobility, and insufficient housing facilities to meet the needs of the urban poor. While in some instances the provision of more public housing would help meet the demand, a more cost-effective approach in most cases would be to remove perverse housing incentives and introduce or expand measures that would strengthen the market for housing inputs supply and offer households greater choice.

In the developing countries, the emphasis needs to be on urban housing markets. Reforms in financial intermediation and increased land tenure security would encourage people to undertake construction. The provision of infrastructure, relaxation of the legal and regulatory framework affecting housing and land ownership, reducing barriers to entry and greater competition in the construction and building materials industry would reduce costs. Specific measures that Governments could take would include reducing uncertainty in interpreting and applying regulations, removing bureaucratic bottlenecks which impede, delay and increase transaction costs, modifying building codes for lower-income communities, providing standard levels of infrastructure facilities to all communities located on land where ownership is not seriously contested, supplying land titles and post-facto legal recognition to solidly built dwellings in consolidated settlements in acceptable urban locations, and waiving the application of rent-control laws to small-scale owner-occupied premises and phasing out such regulations in all rental premises. Research on local inexpensive building materials that comply with minimum performance standards would also help substantially.

In the developed market-economy countries, the imbalances of "overconsumption" of housing by the rich and homelessness on the part of the poor can be reduced by shifting public subsidies away from upper-income home-owners to rent supplements for low-income households. Tax exemption of interest payments should aim to help reduce payments by first-time buyers during the first few years of their mortgages. Rent controls should be phased out to reduce distortions in the rental market and activate the filtering down of older rental stock to low-income groups and to increase labour mobility. In some cities, out-patient services and counselling might be provided, in cooperation with voluntary groups, to mentally incompetent and alcoholic or drug-addicted homeless persons.

In the economies in transition, chronic housing shortages and overcrowding and the process of transition create special problems. Renewed activity in the housing sector is likely to wait for market mechanisms to emerge. A part of the reforms will activate the market for existing dwelling units. 48/ Further institutional changes will need to be made for clarifying property rights between renters and owners, providing transitional subsidies before shifting to a system of targeted housing allowances for disadvantaged households, introducing mortgage financing for housing, increasing competition in the housing construction industry and making urban planning more efficient in site selection, space utilization and infrastructure provision.

## Notes

1/ See, for example, R. Stren and R. White, eds., African Cities in Crisis: Managing Rapid Urban Growth (Boulder, Colorado, Westview Press, 1989).

2/ See Housing and Economic Adjustment (United Nations publication, Sales No. E.88.IV.1), p. 7.

3/ See J. Breman, "Calcutta and the urban order in Asia", Development and Change, vol. 14, No. 2 (April 1983), pp. 157-158.

4/ See S. Malpezzi, G. Tipple and K. Willis, Costs and Benefits of Rent Control: A Case Study in Kumasi, Ghana, World Bank Discussion Paper No. 74 (Washington, D.C., 1990).

5/ See, for example, K. Sunil and F. van den Eerenbeemt, "Renting - its place in the housing market of developing countries", Bulletin for the Institute for Housing Studies BIE (Rotterdam, 1988); World Bank, "Rental housing: a rediscovered priority", The Urban Edge, vol. 8, No. 2 (1984), pp. 1-5; A. Lemar, "The role of rental housing in developing countries: a need for balance", World Bank Report No. UDD-104 (Washington, D.C., 1987); and M. Edwards, "Rental housing and the urban poor: Africa and Latin America compared", in P. Amis and P. Lloyd, eds., Housing Africa's Urban Poor (Manchester, Manchester University Press, 1990), pp. 253-272. For Latin America, see A. Gilbert, "Renting and the transition to owner occupancy in Latin American cities", Habitat International, vol. 15, No. 1/2 (1991), pp. 87-99. For Africa, see T. Akin Aina, "Petty landlords and poor tenants in a low-income settlement in metropolitan Lagos, Nigeria", in P. Amis and P. Lloyd, eds., Housing Africa's Urban Poor ..., pp. 87-101; P. Amis, "Squatters or tenants: the commercialization of unauthorized housing in Nairobi", World Development, vol. 12, No. 1 (1984), pp. 87-96; and C. Grootaert and J. Dubois, "Tenancy choice and the demand for rental housing in the cities of the Ivory Coast", Journal of Urban Economics, vol. 24 (1988), pp. 44-63. For Asia, see M. Hoffman and others, "Rental housing in urban Indonesia", Habitat International, vol. 15, No. 1/2 (1991), pp. 181-206.

6/ See M. Edwards, op. cit., pp. 256-257.

7/ See B. Renaud, The Role of Housing Finance in Development: Issues and Policies (Washington, D.C., World Bank, July 1989).

8/ This argument emerges from analysing the results of a stock-user matrix applied to a hypothetical city in a developing country. See P. Strassmann, Housing and Building Technology in Developing Countries (East Lansing, Michigan State University Press, 1978), chap. 7.

9/ See "Housing: enabling markets to work", World Bank Policy Paper (Washington, D.C., May 1992), p. 14.

10/ See P. Strassmann, "The timing of urban infrastructure and housing improvements by owner occupants", World Development, vol. 12, No. 7 (July 1984), pp. 743-754.

## *Notes* (continued)

11/ See *Living Conditions in Developing Countries in the Mid-1980s: Supplement to the 1985 Report on the World Social Situation* (United Nations publication, Sales No. E.85.IV.3), p. 47.

12/ See WHO, "The International Drinking Water Supply and Sanitation Decade: end of the decade review (as of December 1990)" (Geneva, August 1992) (WHO/CWS/92.12).

13/ Ibid., pp. 30-32 and 47-49.

14/ See B. Koeppel, "Water: save now or pay later", *The Urban Edge*, vol. 15, No. 3 (April 1991), pp. 1-6.

15/ In the United States, during the 20 years from 1970 to 1990, the median price of a starter home for a typical married couple between 25 and 29 years of age rose by 21 per cent in constant dollars, while the income of this typical couple declined by 7 per cent, from $28,500 to $26,700, in constant dollars. During the same time-span, incomes of couples 10 or more years older than this age group stayed even or rose and the older group took advantage of their improving finances to increase their share of homeownership. Accordingly, the proportion of all households headed by people aged 25 to 34 years who own their home has dropped, from 51 per cent in 1973 to 44 per cent in 1990, while the proportion of people 45 to 64 years rose from 76 per cent to 78 per cent between 1973 and 1990. The tabulations are largely based on the 1973, 1976 and 1980 editions of the *American Housing Survey* and the 1983, 1987 and 1990 editions of the *Current Population Survey* of the Harvard/MIT Joint Center for Housing Studies.

16/ See *Housing and Economic Adjustment* ...

17/ See OECD, *Maintenance and Modernization of Urban Housing* (Paris, 1986), p. 45.

18/ See *Housing and Economic Adjustment* ...

19/ See S. Redburn and T. Russ, *Responding to America's Homeless: Public Policy Alternatives* (New York, Praeger, 1986), p. 102.

20/ See OECD, *The Control and Management of Government Expenditure* (Paris, 1987).

21/ As of the mid-1980s, the share of public housing in the total housing stock was 38 per cent in Sweden, 31 per cent in the Netherlands, 30 per cent in the United Kingdom, 17 per cent in Denmark, 17 per cent in France, 7 per cent in Germany, 5 per cent in Italy, 2 per cent in Spain and 2 per cent in the United States. See B. Renaud, *Housing Reform in Socialist Economies*, World Bank Discussion Paper No. 125 (June 1991), p. 38.

22/ See *Rent Policy in ECE Countries* (United Nations publication, Sales No. E.90.II.E.29).

23/ See *Housing and Economic Adjustment* ...

## Notes (continued)

24/ See, for instance, S. Mayo, "Sources of inefficiency in subsidized housing programs: a comparison of U.S. and German experiences", Journal of Urban Economics, vol. 20 (1986), p. 236.

25/ In London, Paris and Rome, for example, thousands of privately owned flats stand empty owing to rent laws that make it nearly impossible to remove current tenants. See "Time to let go", The Economist, 17-24 January 1987, p. 53.

26/ See Housing and Economic Adjustment ...

27/ In a survey of 50 cities in the United States, there was evidence of significant correlation between increases in homelessness and the existence of rent controls. See W. Tucker, "Where do the homeless come from?", National Review, 25 September 1987.

28/ See OECD, Tax Expenditures: A Review of the Issues and Country Experiences (Paris, 1984), p. 81.

29/ See Housing and Economic Adjustment ...

30/ In the United States, under the Tax Reform Act of 1986, several million middle-income home-owners were denied the deduction of interest on home mortgage debt from income assessed to tax. High-income households, in contrast, continued itemizing their deductions, with the result that in 1988 more than half of the implicit subsidy associated with mortgage interest deductions accrued to the 8 per cent of taxpayers with the highest incomes. See J. Porteba, "Taxation and housing: old questions, new answers", NBER Working Paper No. 3963 (January 1992).

31/ In Japan, the United Kingdom and the United States, house prices during the 1980s increased by 300, 75 and 30 per cent, respectively, and household debts in those countries were in the range of 96-117 per cent of disposable income in 1991, as opposed to 60-82 per cent in 1980. See "Economic focus: in the valley of the shadow of debt", The Economist, 7-13 November 1992, p. 97.

32/ Ibid.

33/ In the United States, they are projected to fall by 10 to 15 per cent during the period 1988-2007. See P. Hendershott, "Are real prices likely to decline by 47 per cent?", NBER Working Paper No. 3880 (October 1991).

34/ See, for example, M. Boleat, "Home ownership and renting: international comparisons", Housing Finance International, vol. 1, No. 4 (May 1987), p. 7.

35/ See OECD, Urban Infrastructure: Finance and Management (Paris, 1991), p. 14.

36/ See OECD, Environmental Policies for Cities in the 1990s (Paris, 1990).

## Notes (continued)

37/ See Housing and Economic Adjustment ...

38/ See Narodnovy Khoziaystvo SSR v 1985 Godu (Moscow, 1986), p. 430.

39/ According to national sources, the waiting period for an apartment is likely to range from 15 to 30 years in Poland, 10 years or more in the former Soviet Union, 4 to 10 years in Hungary and about 5 years in Czechoslovakia. See Housing and Economic Adjustment ..., p. 39. As for mobility, the rate of housing turnover was as low as 1 per cent in Poland and Romania in the late 1980s, as compared to 15 to 20 per cent in developed market-economy countries. See B. Renaud, op. cit., p. 13.

40/ See Housing and Economic Adjustment ...; and B. Renaud, Housing Reform in Socialist Economies ..., p. 30.

41/ See B. Renaud, Housing Reform in Socialist Economies ..., p. 26.

42/ The difficulties of the housing sector in competing for materials in short supply in centrally planned economies were apparent by the early 1980s. See Relationship between Housing and the National Economy (United Nations publication, Sales No. E.85.II.E.16).

43/ See B. Renaud, Housing Reform in Socialist Economies ..., p. 30.

44/ See UNCHS (Habitat), "Report on the subregional seminar for Eastern European countries", Moscow, 3-7 September 1990.

45/ See R. Buckley, "Hungary's reforms: where gradual is better", The Urban Edge, vol. 15, No. 1 (January/February 1991), p. 2; "Local government re-organization and housing policy in Budapest: a round-table discussion", International Journal of Urban and Regional Research, vol. 16, No. 3 (September 1992), p. 483. For a broad discussion of the access by high-level officials to choice large apartments, luxury cars, vacation travel abroad, government health clinics with modern imported equipment and other privileges, see J. Winiecki, Resistance to Change in the Soviet Economic System: A Property Rights Approach (London, Routledge, 1991).

46/ House price to income ratio (the ratio of the average trading price of a housing unit to the average cash income of households in a given city) is estimated to range between 10 and 20 in Poland, 8 and 13 in Hungary and 7 and 10 in the former Soviet Union, as opposed to a median of 3.9 in the developed market-economy countries and 5.5 in the developing countries. See Housing: Enabling Markets to Work, World Bank Policy Paper (May 1992), table 2.1.

47/ See "Russia's value gap", The Economist, 24-30 October 1992, p. 75.

48/ The primary purpose of privatization of the existing housing stock is to place the stock in the hands of owners who will utilize the existing stock of housing more efficiently and rationally than the State, thereby reducing inter-market spillovers and stimulating better maintenance and improvements in the stock. See J. Kornal, The Road to a Free Economy, (New York, W. W. Norton, 1990), p. 82.

# Chapter VI

## UNEMPLOYMENT AND LOW-PRODUCTIVITY EMPLOYMENT

Unemployment and low-productivity employment are among the outstanding economic and social problems in all parts of the world. They are by far the most important cause of poverty in all countries and the creation of more productive employment opportunities is essential to eradicate poverty. The search for employment is one of the principal motives for migration from developing countries to developed countries. Although the magnitude of the problem has increased, there have been no such fresh insights into the problem as were presented in the 1930s. The search for such insights will remain a major preoccupation among both policy makers and economists.

In developing countries there has been no matching increase in productive employment to absorb the large increase in the labour force consequent upon rapid population growth during the period 1960-1980. In economies in transition, the process of change has been accompanied by drastic falls in output and employment. In developed countries, continuing high levels of unemployment have remained impervious to policy initiatives. In the latter two groups of countries, there exists an additional transitory problem created by success in reducing the production of armaments and the size of the armed forces. Also, the reduction of military conflicts and tensions in developing countries has reduced the demand for armaments produced in the other two groups of countries.

All countries are affected, although to varying degrees, by the rapid process of labour-saving technical progress. The high priority given to the objective of maintaining price stability has reduced the scope of fiscal policy in raising aggregate demand and employment; and the more open nature of economies has reduced the capacity in any individual country for doing so without also creating imbalances in the external account. The threat of hyperinflation in economies in transition has virtually eliminated such an option. In all countries, a desire to trim the size of Governments has reduced opportunities for employment in the government sector. In developing countries, stabilization and adjustment policies have, at least for the short term, raised levels of unemployment.

A common policy response has been to improve the functioning of labour markets through such measures as freeing wages from various regulations, eliminating restrictive practices sometimes imposed by trade unions, providing better opportunities for training, changing housing policies that bind workers to particular localities and providing more and better housing. It was also expected that more liberal economic policies would encourage greater entrepreneurship, which would raise output and employment.

Unemployment statistics are not precise and easily comparable among countries. In general, a person is considered unemployed if he or she is without paid employment or self-employment, and is currently available for work and actively seeking it. The data do not include unemployed persons who, having long been unemployed and being discouraged as a result of looking for work, are not doing so; nor persons who are underemployed. Young people discouraged from looking for work may decide to study longer instead of remaining unemployed. Older people might choose to retire voluntarily, involuntarily or with encouragement when unemployment is high. There are differences among countries as to age limits, criteria for what constitutes the active seeking of work and other relevant categories. 1/

Data on underemployment and low-productivity employment are quite scarce. In developing countries, underemployment is the more pervasive problem and rural unemployment is therefore often incorrectly recorded as low in those countries.

Official data on unemployment in many developing countries include persons who are employed but are seeking a different job. Employment offices are mainly in cities and many people cannot expend the resources needed to register their names. Unemployment figures can be improved upon with other data. In Latin America, labour force sample surveys, which yield the most comprehensive statistics, are available, although only for urban areas. In Asia, data are derived from labour force sample surveys (except in Bahrain, Cyprus, India and Malaysia, which use employment office statistics). China provides official estimates for urban areas.

The present chapter analyses the extent of unemployment and low-productivity employment and presents the policy responses aimed at ameliorating these conditions.

## A. Developing countries

### 1. Employment and growth

The rapid population increase of the 1950s and 1960s in developing countries turned into an even more extensive labour force increase during the 1970s and 1980s (see chapter I). The world labour force in 1993 is estimated to be 2.4 billion people, of whom 1.8 billion (75 per cent) are in developing countries. The economically active population in the world grew by 396 million in the 1980s. The corresponding figure in the 1970s was 352 million and in the 1960s, 247 million. The increase in the 1990s is expected to decline to 383 million. An increasing proportion of labour force growth is taking place in developing countries - 82 per cent in the 1970s, 88 per cent in the 1980s and 92 per cent in the 1990s. Annually, some additional 38 million persons will seek employment in developing countries during the decade of the 1990s. However, the increase in the labour force population has surpassed formal employment creation in many countries. As a result, open unemployment, underemployment in particular in agriculture, and employment in the informal sector have been high. Employment conditions have improved markedly only in countries such as Malaysia, Mauritius, the Republic of Korea, Singapore and Thailand, where the manufacturing sector has grown rapidly from a relatively large base.

The labour force in developing countries will grow at the rate of roughly 3 per cent per annum. In Africa, this rate of growth will increase from 3 to 3.5 per cent. Since roughly 50 per cent of all output accrues to labour, developing economies will need to grow at the rate of 6 per cent per annum (and 7 per cent per annum in Africa) during the present decade in order to absorb the growing labour force at current levels of income. Since there are already large contingents of unemployed persons, rates of economic growth will need to be in the order of 8-9 per cent per annum over a decade or more to provide adequate opportunities for employment in developing countries. If capital/output ratios are of the order of 3 to 1, net investment ratios will need to be 24-27 per cent, calling forth gross investment ratios, on a very conservative estimate, of 32-36 per cent.

Growth rates and investment ratios of these magnitudes have been sustained in only a few developing countries - Botswana, Egypt and Mauritius in Africa, and China, Indonesia, Malaysia, the Republic of Korea, Singapore and Thailand in Asia - with none in Latin America, where of course the rate of growth of the labour force is much lower (see table VI.1). There were marked improvements during the 1980s in Pakistan and Viet Nam which, if sustained, will raise employment levels and wages. In contrast, there have been steep declines in Côte d'Ivoire, Nigeria, the Sudan, Tunisia and Zambia in Africa, and in Argentina, Brazil, Mexico and Peru in Latin America. The low investment ratios presage continuing unemployment and low incomes, with attendant social and political unrest.

Table VI.2 presents data on total unemployment and unemployment rates in selected developing countries during the 1980s. In most African countries for which there were data, unemployment rates exceeded 10 per cent with that in the Niger about 50 per cent. As per capita gross domestic product (GDP) declined during the 1980s and wage employment stagnated in many sub-Saharan countries, the average urban unemployment rate in sub-Saharan Africa increased (from 10 per cent in the mid-1970s) to about 18 per cent. Mauritius is the one country where unemployment fell during the decade. The International Labour Organisation (ILO) estimates that there were 9 million unemployed in sub-Saharan Africa in 1990 and that that number will increase to 28 million during the 1990s. Urban unemployment is expected to rise to 31 per cent. 2/

In Latin America and the Caribbean region, the unemployment rate was lower in 1990 than in 1981 only in Chile, Colombia, Costa Rica and Jamaica. Unemployment increased substantially in Barbados, Bolivia, Colombia, Nicaragua, Trinidad and Tobago, Uruguay and Venezuela. In Asia, unemployment rates often decreased and were mostly lower than those in Africa and Latin America. Since several Asian countries have very large populations, the number of unemployed is large. In India, more than 34 million people were registered as looking for employment in 1990, 10 million more than in all Organisation for Economic Cooperation and Development (OECD) countries combined. Unemployment rates exceed 3 per cent in a few countries, including Bangladesh, Fiji, Malaysia, the Philippines and Sri Lanka. Moreover, countries with high unemployment rates also experienced rising rates during the 1980s. 3/

## Table VI.1. Growth of output

(Annual percentage change in gross domestic product (GDP))

| | 1971-1980 | 1981-1990 | 1989 | 1990 | 1991 | 1992 |
|---|---|---|---|---|---|---|
| World | 5.6 | 2.8 | 3.3 | 1.7 | -0.6 | 0.6 |
| Developed market economies | 3.4 a/ | 2.8 | 3.4 | 2.4 | 0.7 | 1.5 |
| Economies in transition | 5.4 a/, b/ | 2.2 | 2.3 | -5.0 | -16.0 | -14.7 |
| Developing economies | 5.6 | 3.2 | 3.5 | 3.4 | 3.4 | 4.5 |
| Latin America and the Caribbean | 5.9 | 1.3 | 1.1 | 0.1 | 2.8 | 2.0 |
| Africa | 5.0 | 2.1 | 3.0 | 2.9 | 2.1 | 2.3 |
| West Asia | 5.6 | -0.8 | 3.2 | 1.9 | -0.1 | 5.1 |
| South and East Asia excluding China | 5.5 | 5.9 | 6.1 | 6.3 | 5.6 | 5.4 |
| China | 5.9 | 8.7 | 3.6 | 5.2 | 7.0 | 10.0 |
| India | 3.2 | 5.3 | 5.2 | 5.0 | 3.3 | 3.0 |
| Indonesia | 5.1 | 8.0 | 7.4 | 7.4 | 6.6 | 6.5 |
| Korea, Republic of | 8.2 | 8.4 | 6.1 | 9.0 | 8.4 | 7.3 |
| Malaysia | 8.6 | 5.8 | 8.8 | 9.8 | 8.8 | 8.5 |
| Pakistan | 4.7 | 6.2 | 4.8 | 4.6 | 6.0 | 6.0 |
| Singapore | 9.1 | 6.9 | 9.2 | 8.3 | 6.7 | 5.5 |
| Thailand | 6.9 | 7.2 | 12.2 | 10.0 | 7.5 | 7.4 |
| Viet Nam | 1.0 | 5.8 | 8.0 | 5.1 | 3.8 | 7.0 |
| Botswana | 11.3 | 10.3 | 13.5 | 6.3 | 8.7 | 6.5 |
| Egypt | 7.0 | 6.3 | 2.3 | 2.6 | 2.5 | 3.0 |
| Mauritius | 6.2 | 6.2 | 4.7 | 7.1 | 4.6 | 5.5 |

Source: Data bank of the Department of Economic and Social Development of the United Nations Secretariat and World Economic Survey, 1981-1982: Current Trends in the World Economy (United Nations publication, Sales No. E.82.II.C.1).

a/ Not strictly comparable with other data in table.

b/ Net material product (NMP).

## Table VI.2. Unemployment in developing countries

| | Total unemployment (thousands) | | | Unemployment rate (percentage) | | |
|---|---|---|---|---|---|---|
| | 1981 | 1985 | 1990 | 1981 | 1985 | 1990 |
| **Africa** | | | | | | |
| Botswana | .. | .. | .. | .. | 31.2 a/ | .. |
| Burundi | 6.7 b/ | 1.9 | 14.5 | .. | .. | .. |
| Côte d'Ivoire | .. | .. | .. | .. | 20.0 a/ | .. |
| Ethiopia | 61.6 | 56.4 | 44.2 | 23.0 a/ | .. | .. |
| Ghana | 32.4 | 24.2 | 27.4 c/ | 1.0 | 0.4 | .. |
| Kenya | .. | .. | .. | .. | 16.2 a/ | .. |
| Mauritius | 56.5 | 64.8 | 12.8 | .. | .. | .. |
| Niger | 22.7 | 29.0 | 24.6 c/ | 39.9 | 56.3 | 46.8 c/ |
| Nigeria | 15.7 | 28.3 | .. | .. | 9.7 a/ | .. |
| Réunion | 33.2 | 45.0 | 56.5 | .. | .. | .. |
| Senegal | 11.9 | 10.8 | .. | .. | 17.3 a/ | .. |
| Seychelles | 0.6 | 5.7 | .. | 3.8 | 22.5 | .. |
| Sierra Leone | 8.4 | 0.3 | .. | .. | .. | 14.8 a/ |
| Somalia | .. | .. | .. | 22.3 a/, b/ | .. | .. |
| Sudan | 68.8 | 48.8 | 70.1 | .. | 12.1 | .. |
| Tunisia | 83.4 | 84.0 | 105.9 | | | 13.4 |
| United Republic of Tanzania | | .. | .. | .. | 21.6 | .. |
| Zambia | | | | 31.0 a/, d/ | 19.0 a/ | |
| **Latin America and the Caribbean** | | | | | | |
| Argentina a/ | 174.8 | 216.2 | 322.6 c/ | 4.5 | 5.3 | 7.3 c/ |
| Barbados | 12.2 | 21.2 | 18.6 | 10.8 | 18.7 | 15.0 |
| Bolivia | 180.5 | 370.9 | 432.4 | 9.7 | 18.0 | 19.0 |
| Brazil a/ | 2 023.0 | 1 875.0 | .. | 4.3 | 3.4 | .. |
| Colombia a/ | 266.2 | 499.9 | 491.6 | 8.1 | 14.0 | 10.2 |
| Costa Rica | 69.6 | 60.8 | 49.5 | 8.7 | 6.8 | 4.6 |
| Chile | 417.0 | 516.5 | 268.9 | 11.3 | 12.1 | 5.6 |

## Table VI.2 (continued)

| | Total unemployment (thousands) | | | Unemployment rate (percentage) | | |
|---|---|---|---|---|---|---|
| | 1981 | 1985 | 1990 | 1981 | 1985 | 1990 |
| **Latin America and the Caribbean (continued)** | | | | | | |
| Ecuador | .. | .. | 193.6 c/ | .. | .. | 8.0 c/ |
| French Guinea a/ | 1.9 | 4.2 | 4.4 | 12.0 | 13.5 | 13.9 |
| Guatemala a/ | 3.1 | 2.7 | 1.8 | .. | .. | 7.2 |
| Jamaica | 255.8 | 260.8 | 177.4 c/ | 25.9 | 25.0 | 16.8 c/ |
| Mexico | .. | .. | .. | 4.2 | 4.4 | 2.6 |
| Nicaragua | .. | 34.6 | 160.0 | .. | 3.2 | 12.0 |
| Panama | 51.5 | 88.3 | 133.7 c/ | 8.4 | 12.3 | 16.3 c/ |
| Peru a/ | 93.6 | .. | 186.7 c/ | .. | .. | 7.9 c/ |
| Trinidad and Tobago | 45.4 | 72.8 | 103.4 c/ | 10.2 | 15.5 | 22.0 c/ |
| Uruguay a/ | 37.0 | 77.9 | .. | 6.6 | 13.0 | 9.2 |
| Venezuela | 324.9 | 767.1 | 584.3 c/ | 6.4 | 13.1 | 8.7 c/ |
| **Asia** | | | | | | |
| China a/ | 4 395.0 | 2 385.0 | 3 832.0 | 3.8 | 1.8 | 2.5 |
| Cyprus | 5.9 | 8.3 | 5.1 | 2.6 | 3.3 | 1.8 |
| Hong Kong | 88.7 | 83.6 | 37.0 | 3.6 | 3.2 | 1.3 |
| Indonesia | 1 639.0 | 1 368.0 | 2 083.0 | 2.7 | 2.1 | 2.8 |
| Israel | 68.4 | 97.0 | 158.0 | 5.1 | 6.7 | 9.6 |
| Korea, Republic of | 660.0 | 622.0 | 451.0 | 4.5 | 4.0 | 2.4 |
| Malaysia | 251.0 | 417.0 | 443.0 | 4.7 | 6.9 | 6.3 |
| Myanmar | 618.8 | 338.0 | 555.3 | 4.3 | 2.2 | .. |
| Pakistan | 923.0 | 1 042.0 | 996.0 | 3.6 | 3.7 | 3.1 |
| Philippines | 1 008.0 | 1 316.0 | 1 993.0 | 5.4 | 6.1 | 8.1 |
| Singapore | 33.2 | 49.8 | 22.7 | 2.9 | 4.1 | 1.7 |
| Sri Lanka | 897.0 | 840.0 | 1 005.0 | 17.9 | 14.1 | 14.4 |
| Thailand | 267.0 | 1 337.0 | 433.0 c/ | 1.3 | 2.6 | 1.4 c/ |

(Source and footnotes on following page)

(Source and footnotes to table VI.2)

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Source: Yearbook of Labour Statistics, 1991 (Geneva, International Labour Organisation, 1991); World Labour Report, 1992 (Geneva, ILO, 1992) and World Labour Report, 1989 (Geneva, ILO, 1989); Key Indicators of Developing Asian and Pacific Countries, vol. XXII, 1991 (Manila, Asian Development Bank); and African Employment Report, 1990 (Jobs and Skills Programme for Africa, Addis Ababa, 1991).

a/ Urban unemployment only.

b/ 1982 data.

c/ 1989 data.

d/ 1980 data.

### 2. The young and the educated

As an initial response to economic crises of the 1980s, many countries, for example, Egypt, Malaysia and several in Latin America, expanded public sector employment. 4/ However, as the crises deepened, it became necessary to reduce employment either on their own or on the advice of the Bretton Woods institutions. In eight sub-Saharan countries, employment growth in the public sector decelerated from a weighted average of 7.3 per cent per year in 1975-1980 to 2.4 per cent in the following five years. In the 1980s, 45,000 public sector workers in Ghana, 40,000 in Guinea, 27,000 in the United Republic of Tanzania and 16,000 in Cameroon lost their employment. A recruitment freeze was imposed in Angola, Benin, the Gambia, Kenya, Mauritania, Mozambique, Sierra Leone, Somalia and the United Republic of Tanzania. Guaranteed employment schemes for graduates were discontinued in Benin, the Central African Republic, the Congo, Guinea, Mali, Rwanda, Somalia and the Sudan. 5/ In eight Latin American countries (not including Chile), government employment grew faster than total employment until 1984, but afterwards growth of government employment was about the same as or slower than that of total employment. Since 1985, several Governments, including those of Bolivia, Brazil, Chile, Costa Rica and Mexico, have started to cut government employment. In Asia, similar trends have been observed but negative effects on public employment have been in general less severe than in other regions. 6/

Two pressing problems in many developing countries are high unemployment among the young and high unemployment among the educated. Unemployment rates are often highest among those who have completed secondary education (see table VI.3). Unemployment among persons with third-level education is, in several countries, higher than among those without any education whatever. In Africa, unemployment among persons who completed a secondary education has increased. In urban Kenya, 55 per cent of the unemployed completed secondary education in 1986, compared with 30 per cent in 1977-1978. In Zimbabwe, 54 per cent of the unemployed population had post-primary education in 1986-1987. In Nigeria, the proportion of the unemployed with secondary education increased from 24 to 51 per cent between 1974 and 1985. On average, the share in the unemployed population of people with secondary education doubled between the mid-1970s and the mid-1980s to approximately 50 per cent and has not changed much since then. 7/ In India, Indonesia, Panama and the Syrian Arab Republic, unemployment among those with tertiary education was higher or no lower than among those with lower-level education. In other countries, unemployment among persons with tertiary education was generally lower than among other categories.

In 32 developing countries for which data were available, more than 2.3 million people who had been previously employed as professional, technical, administrative or managerial workers and had most likely benefited from a tertiary education were unemployed at the end of the 1980s. 8/ They represented 5.7 per cent of all unemployed in those countries. In 24 out of the 32 countries, the percentage of educated unemployed increased at the end of the decade, compared with the beginning. These were the people who had made the greatest investment in their education and whose skills were the most marketable internationally. In the absence of work opportunities at home, they would look for work in other countries.

Table VI.3. Unemployment rate in developing countries by age and level of education, 1989-1990

(Percentage)

| | Total unemploy-ment | Age | | | | Education | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Youth (15-24) | | Adult (25 and over) | | | | | |
| | | Male | Female | Male | Female | None | First level | Second level | Third level |
| Algeria | .. | .. | .. | .. | .. | 9 | 24 | 29 | 6 |
| Tunisia | 13.4 | .. | .. | .. | .. | 11 | 20 | 17 | 5 |
| Brazil | .. | 6 | 8 | 2 | 2 | 1 | 3 | .. | .. |
| Chile | 5.6 | 13 | 12 | 3 | - | .. | .. | .. | .. |
| Colombia | 10.2 | .. | .. | 5 | 8 | 8 | 8 | 13 | 8 |
| Costa Rica | 4.6 | 8 | 10 | 3 | .. | 5 | 4 | 6 | 3 |
| Guatemala | 7.2 | 3 | 6 | 1 | 1 | - | 2 | 7 | 2 |
| Honduras | 7.7 | .. | .. | .. | .. | 2 | 4 | 8 | 6 |
| Jamaica | 16.8 | 34 | 99 | 6 | 21 | .. | .. | .. | .. |
| Mexico | 2.6 | 3 | 7 | 2 | 3 | .. | .. | .. | .. |
| Panama | 16.3 | 29 | 44 | 10 | 15 | - | 2 | 6 | 6 |
| Paraguay | 6.6 | .. | .. | .. | .. | .. | 5 | 8 | 4 |
| Trinidad and Tobago | 22.0 | 37 | 46 | 9 | 14 | 11 | 21 | 25 | 5 |
| Uruguay | 9.2 | .. | .. | .. | .. | 3 | 6 | 11 | 7 |
| Venezuela | 8.7 | 17 | 16 | 7 | 5 | 6 | 12 | 13 | 6 |
| Hong Kong | 1.3 | 4 | 3 | 1 | 1 | 1 | 1 | 2 | 1 |
| India | .. | .. | .. | .. | .. | 2 | 3 | 9 | 12 |
| Indonesia | 2.8 | 14 | 11 | 1 | - | 1 | 1 | 10 | 10 |
| Korea, Republic of | 2.3 | 9 | 6 | 1 | - | .. | 1 | 3 | 4 |
| Pakistan | 3.1 | .. | .. | .. | .. | 2 | 3 | 6 | 4 |
| Singapore | 1.8 | 3 | 3 | 2 | 1 | 2 | 2 | 2 | 2 |
| Syrian Arab Republic | .. | .. | .. | .. | .. | 3 | 7 | 8 | 8 |
| Thailand | .. | 5 | 6 | 1 | 1 | 1 | 3 | 6 | .. |

Source: World Labour Report, 1992 (Geneva, ILO, 1992).

Unemployment is related to level as well as type of education. In Africa, the share of students in vocational education fell from 14 per cent in 1965 to 6 per cent in 1987 while that of students in general secondary education rose from 78 to 89 per cent during the same period. A trend involving a move away from science and technology towards arts and humanities has been observed in universities as well. 9/ These developments are expected to further lead to major problems in the graduate labour market. In Thailand and Malaysia, labour shortages in specific skill segments are reported to have emerged after several years of high-level economic growth; this situation highlights the importance of matching training with the demand for skills in the economy.

Unemployment rates among persons younger than 25 years are often two to four times as high as among persons older than 25. In 15 sub-Saharan countries in the mid-1980s, youth unemployment rates were on average three times higher than those for adult unemployment. Youth unemployment rates of 30 per cent or more are not uncommon in sub-Saharan Africa and the Caribbean (see table VI.3). During the 1980s, the share of youth in total unemployment decreased in many of the 12 countries (all in Asia or Latin America) for which information was available, but often the share remained above 50 per cent. In many countries, the educated youth were disproportionately affected by unemployment. In India, young people accounted for about 80 per cent of long-term unemployment among males, and young people with secondary- or higher-level schooling, who constituted 12 per cent of the labour force, accounted for almost one third of all unemployed at the end of the 1980s. In Egypt, 80 per cent of the unemployed were new entrants to the labour force and 75 per cent of those new entrants had received an education at the secondary level or above. 10/

### 3. Low-productivity employment

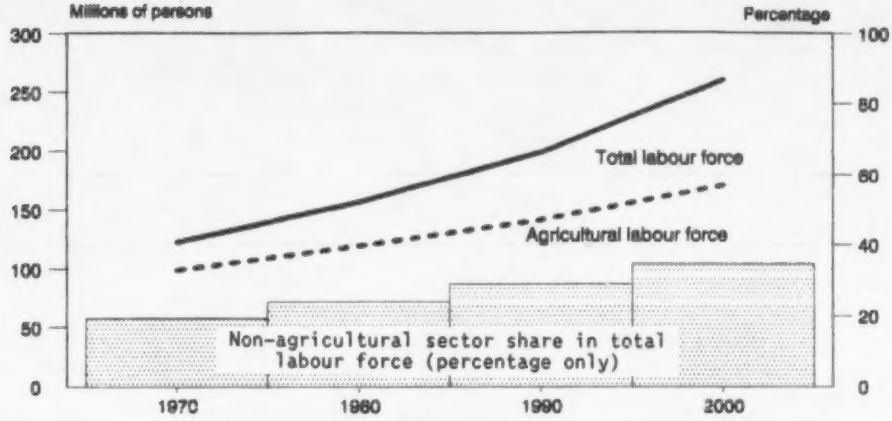
Unemployment rates do not include those in disguised unemployment and the underemployed, caricatured in the image of the young man waiting by the roadside to inflate bicycle tyres. In many developing countries, their number is quite large and it increased during the 1980s. In the Philippines, urban and rural underemployment in 1991 was estimated to be about 20 and 41 per cent respectively, compared with an official total unemployment rate of 8 per cent. In Pakistan, combined open and disguised unemployment in 1990 may have exceeded 13 per cent, four times the recorded unemployment rate. In 1990, in China, the number of unemployed, underemployed and casually employed persons may have been as high as 50 million, compared with 3.8 million, the figure for the officially unemployed. 11/ Underemployed persons typically earning lower incomes than others are common in the informal and agricultural sectors. The sizes of these two sectors can give some indication of the underutilization of labour in several countries.

Estimates of the share of the informal sector in urban or non-agricultural employment vary between 20 and 60 per cent. In Latin America, the share of the informal sector in total non-agricultural employment increased from 25 per cent in 1980 to 31 per cent in 1989. In general, the size of the informal sector is inversely related to the level of development and the size of the manufacturing sector. In Africa, the informal sector is estimated to employ an estimated 61 per cent of the urban labour force; in the newly industrialized countries in Asia, the figure lies between 10 and 20 per cent. 12/ During the 1980s, as a result of declining economic activity and the slow or negative growth of wage employment in the manufacturing and public sectors, the informal sector increased in many countries in Latin America and Africa and in some countries in Asia.

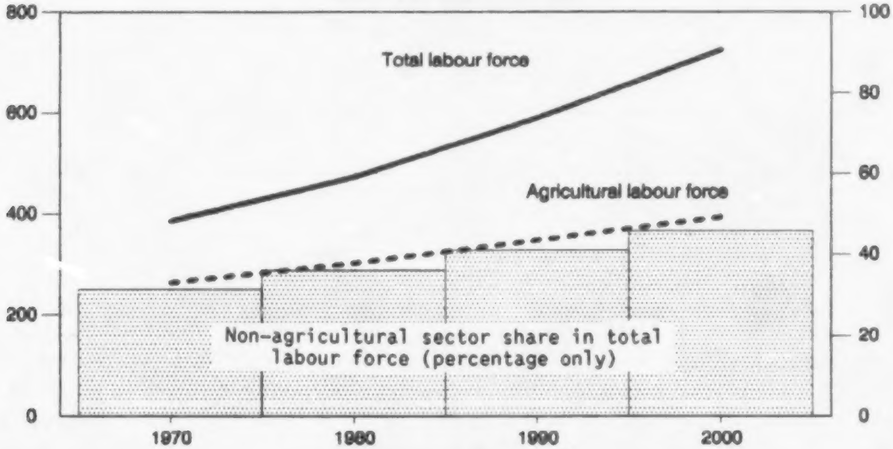
The inverse relation between the size of the informal sector and economic development does not imply that earnings in the informal sector are generally lower than elsewhere or that employment in the informal sector is always temporary, involuntary, isolated from the rest of the economy and chosen as a last resort. The average income of entrepreneurs in the informal sector is usually many times the official minimum wage or earnings in the agricultural sector, and significantly higher than the average wage in the formal sector. However, incomes are far more insecure. Employees within the informal sector, excluding apprentices and family workers, earn on average between one and two times the minimum wage. Apprentices in the formal sector earn normally less than the minimum wage. The informal sector is in many cases not the employer of last resort. Many migrants from rural areas start in the formal sector and use the skills and money acquired there to set up their own enterprise within the informal sector. 13/

Except where economic growth is rapid, the labour force in agriculture will increase in absolute numbers, although not as a proportion of the total labour force (see figure VI.1). The percentage of the labour force in agriculture is expected to decline in all regions of the world; and in China and Latin America, the agricultural labour force is expected to decline in absolute numbers during the 1990s. These two regions will experience the slowest population growth rates in the developing world. In west Asia and north Africa, the labour force increase of more than 3 per cent per year between 1970 and 2000 has been and will go on being almost completely absorbed in the non-agricultural sectors. The share of those sectors in the labour force will increase in west Asia (from 52 per cent in 1970) to 79 per cent in 2000 and in north Africa (from 49 per cent in 1970) to 73 per cent in 2000. In sub-Saharan Africa and south and east Asia, agriculture continues to be important for the absorption of labour. In sub-Saharan Africa, about half of the 103 million people added to the labour force between 1980 and 2000 are expected to work in agriculture; and in south and east Asia, nearly two thirds of the people added to the labour force over the same period are expected to work in the non-agricultural sector.

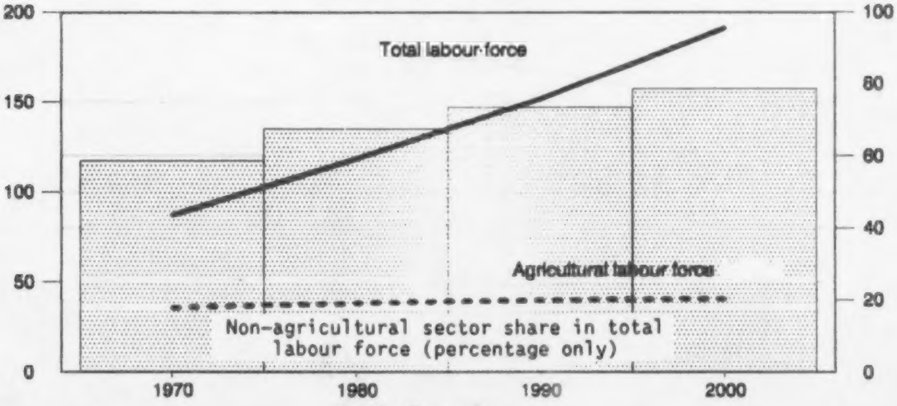
Figure VI.1. Growth in the total and agricultural labour forces, and in the non-agricultural sector share in the total labour force, for selected regions and groups of countries, 1970-2000



**Sub-Saharan Africa**

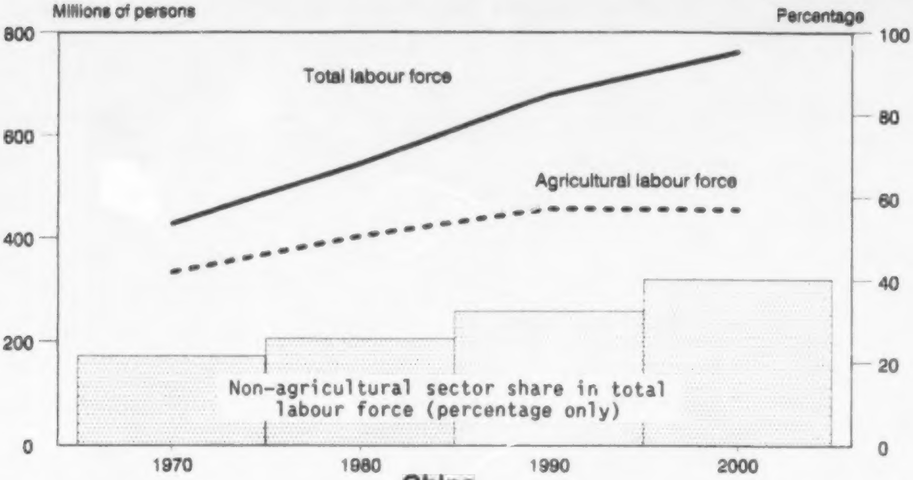


**South and East Asia**

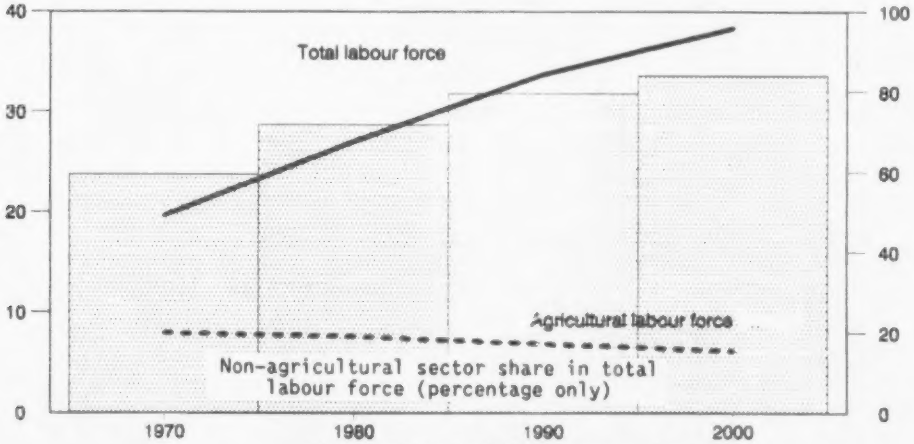


**Latin America**

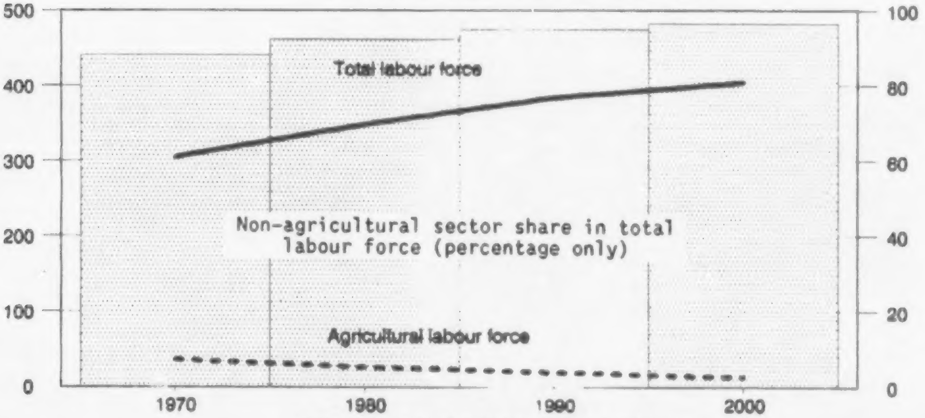
Figure VI.1 (continued)



**China**



**Newly industrializing countries**



**Developed market economies**

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Source: Department of Economic and Social Development of the United Nations Secretariat, macroeconomic data system.

### 4. Child employment

Unemployment among adults coexists with child labour in most developing countries. Some 80 million children between the ages of 10 and 14 are employed in work that is so long or arduous as to interfere with their normal development. 14/ Some of those children, an estimated 30 million, live in city streets. There is some evidence that child labour has increased in the informal sector (while having decreased in the formal sector) in many developing countries in economic crisis.

Children work in almost all sectors of the economy but mostly in agriculture and in domestic services. In general, they work long hours and enjoy insufficient rest periods. Many children are unpaid and some are bonded. If wages are collected, they barely allow for survival. Children rarely receive fringe benefits, insurance or social security and have no rights as workers, since it is illegal to employ them. Because of these cost advantages to employers, they hire children. In general, working conditions in manufacturing are worse than in agriculture and domestic services because parental protection is lacking and work is physically and psychologically more demanding, often dangerous and carried out in conditions of heat, dust and noise.

## B. Developed countries

Between the end of the Second World War (1939-1945) and 1973, most developed market economies experienced very low unemployment rates of about 1.5-3.5 per cent. In Italy and North America, the rates were slightly higher. Since 1973, decline in economic performance, structural changes affecting both demand and supply factors and change in policy objectives have caused a sharp rise in unemployment. Between 1973 and the early 1980s, unemployment rates increased about threefold, except in Austria, Iceland, Japan, Norway, Sweden and Switzerland. During the recession of the early 1980s, unemployment rates peaked at 8.4 per cent (in 1983). In the second half of the 1980s, those rates declined but in 1990 started to increase again in North America, where they reached 7.3 per cent in 1992.

The growth rate of the labour force in OECD countries is decreasing and is currently about 1 per cent per year. At present, about three fourths of the increase in the labour force is due to the increase in the population of working age but this share is decreasing. The remainder can be almost completely accounted for by changes in the participation rates of women between 25 and 54 years of age (see below). The young persons added to the labour force have found it especially difficult to find or to keep a job. In almost all OECD countries, young persons are considerably more affected by unemployment than adults. In 1989, the ratio of the rate of youth unemployment to that of total unemployment ranged from 1.1 in Germany to 2.8 in Italy. For Ireland, the Netherlands and the United Kingdom of Great Britain and Northern Ireland, this ratio was below 1.5 and for the other 10 OECD countries for which data were available, the ratio was between 1.8 and 2.3. Between 1979 and 1989, the difference between youth and total unemployment narrowed in most countries as after 1983 both rates declined. The share of young people in total long-term unemployment also decreased in many countries during the 1980s. However, since 1989, youth unemployment rates have increased again in those countries that have been in recession - Australia, Canada, Finland, New Zealand, Sweden, the United Kingdom and the United States of America. In 1991, youth unemployment rates were still more than 30 per cent in Italy and Spain and more than 15 per cent in Australia, Canada, France, Ireland and New Zealand. Long-term youth unemployment rates remain high in Australia, Greece, Ireland, Portugal and Spain.

The early 1980s were characterized by an increasing share of the long-term unemployed in total unemployment (see table VI.4). In 1983, when the unemployment rate in OECD reached its peak, more than 60 per cent of the unemployed were out of work for more than six months in all European OECD countries except Austria, Luxembourg and those of Scandinavia. Usually, long-term unemployment increases for one or two more years after total unemployment starts to decline, and then it too begins to fall. In several countries, however, the fall in the share of long-term unemployment occurred only after two to five years and sometimes only very slowly. In 1990, 50 per cent or more of all unemployed could not find work for more than a year in many European OECD countries.

Persistence of this problem is partly a result of inherent dynamics, since even if inflow and outflow cancel each other out and the unemployment rate remains unchanged, the share of long-term unemployment is likely to increase. In addition, the longer persons stay unemployed, the lower the exit probability, owing to declining skills and capabilities, decreasing intensity of job search and lesser likelihood of being hired. Some of the policies employed during the 1980s were aimed at remedying these difficulties. The rate of unemployment for a year or more remained below 15 per cent in Austria, North America and Sweden and below about 20 per cent in Finland, Japan and Norway during the 1980s. 15/

Table VI.4. Incidence of long-term unemployment in various countries a/

| | Average 1975-1980 b/ | 1980 | Average 1981-1989 b/ | 1990 |
|---|---|---|---|---|
| Australia | 17.8 | 19.9 | 26.8 | 21.6 |
| Belgium | .. | 61.5 c/ | 70.9 | 69.9 |
| Canada | 2.9 | 3.2 | 8.3 | 5.7 |
| Denmark | .. | 36.2 c/ | 31.6 | 33.7 |
| Finland | .. | 27.0 | 18.8 | .. |
| France | 27.1 | 32.6 | 43.6 | 38.3 |
| Germany | .. | 28.7 c/ | 45.0 | 46.3 |
| Greece | .. | .. | 43.0 | 51.7 |
| Ireland | .. | 38.2 c/ | 62.7 | 67.2 |
| Italy | .. | 51.2 c/ | 64.6 | 71.1 |
| Japan | 16.0 | 16.4 | 16.4 | 19.1 |
| Netherlands | .. | 35.9 c/ | 51.0 | 48.4 |
| New Zealand | .. | .. | .. | 18.7 |
| Norway | 3.1 | 3.3 | 7.7 | 19.2 |
| Portugal | .. | .. | 53.7 | 48.1 |
| Spain | 28.4 | 32.8 | 55.4 | 54.0 |
| Sweden | 6.0 | 5.5 | 9.1 | 4.8 |
| United Kingdom | .. | 29.5 c/ | 44.4 | 36.0 |
| United States | 5.9 | 4.3 | 9.1 | 5.6 |

Source: OECD, Employment Outlook, July 1991 (Paris, OECD, 1991) and OECD, Employment Outlook, July 1992 (Paris, OECD, 1992).

a/ Unemployment for 12 months and over. Data are from household survey sources, except in the case of Austria, where registration data have been used.

b/ Or adjacent years.

c/ For 1979.

## C. Economies in transition

### 1. Economic transition and its implication for labour markets

Growing mass unemployment has become a major social issue for policy makers in all economies in transition. The issue also carries a heavy psychological and emotional load. In these economies under central planning, employment (whether productive or not) was guaranteed to every able-bodied citizen of working age by the State. Workers were used to almost unlimited job security. During the current transition, people at large are psychologically ill prepared for the possibility of unemployment. Negative public reactions to rising unemployment and the subsequent decline in income and status are potentially harmful to the process of economic and political reform.

During the two-year period 1990-1991, there was a 40-fold increase in unemployment in Central and Eastern Europe; and by March 1992, there were over 4 million registered unemployed, up from less than 100,000 at the beginning of 1990. 16/ In Hungary, the rate of unemployment increased fourfold and in Bulgaria and Czechoslovakia, sixfold; in Poland, the number of unemployed doubled, from 1.1 million in 1990 to 2.2 million in 1991 (from 6.1 to 11.4 per cent of the total workforce) 17/ (see also table VI.5).

Another indication of deterioration is the fall in the ratio of unfilled vacancies per 100 job seekers. In Czechoslovakia for instance, by December 1991 there were 12 unfilled vacancies per 100 unemployed, compared with 100 unfilled vacancies per 100 unemployed a year earlier; in Hungary in the same year, the ratio fell from 21:100 to 1:100, in Poland from 9:100 to 2:100 18/ and in Bulgaria (between July 1990 and March 1991) from 180:100 to 6:100. 19/ In the former Union of Soviet Socialist Republics (USSR) in 1991, official statistics still reflected a shortage of labour, with 170 vacancies for each 100 unemployed. 20/ However, the number of vacancies began to decline in the Russian Federation in 1992.

The precipitate increase in unemployment in the economies in transition came with serious cut-backs in output. Both internal and external factors were responsible. On the external side, there was a collapse in foreign trade regimes following the demise of the Council for Mutual Economic Assistance (CMEA). Although new markets were growing in OECD countries for exports from Poland, Hungary and Czechoslovakia, those markets were inadequate to offset in full the loss of traditional ones. Although some prices were liberalized, for example energy prices, a workable pricing system has yet to emerge. Several economic stabilization programmes were accompanied by a set of anti-inflation measures that reduced demand and cut down employment. The reduction of fiscal subsidies to balance the government budget and the tightening of monetary policy brought additional pressure on enterprises to shed some labour. However, the decline in employment for 1991 was much smaller than the fall in output: in Bulgaria, the State firms cut employment by 14.5 per cent as output declined by 27.8 per cent; in Czechoslovakia, the corresponding figures were 21.2 and 7.4 per cent and in Hungary, 19.0 and 6.0 per cent. The more rapid fall in output caused a substantial drop in labour productivity (see table VI.6).

Table VI.5. Open unemployment in Central and Eastern Europe

(Thousands)

| | Registered unemployed | | | | | |
|---|---|---|---|---|---|---|
| | January 1990 | June 1990 | January 1991 | June 1991 | January 1992 | March 1992 |
| Bulgaria | .. | 22 | 74 | 248 | 426 | 453 |
| Czechoslovakia | .. | 13 | 119 | 301 | 523 | 503 |
| Hungary | 23 | 42 | 101 | 186 | 442 | 478 |
| Poland | 56 | 568 | 1 196 | 1 574 | 2 230 | 2 238 |
| Romania | .. | .. | .. | 104 | 386 | 461 |
| Total | 79 | 645 | 1 490 | 2 413 | 3 893 | 4 133 |

Source: Department of Economic and Social Development of the United Nations Secretariat, based on OECD, Employment Outlook, July 1992 (Paris, OECD, 1992).

### Table VI.6. Selected macroeconomic indicators for economies in transition a/

(Percentage change)

| Labour productivity indicator | Bulgaria | Czechoslovakia | Hungary | Poland | Romania |
|---|---|---|---|---|---|
| Output (GDP/NMP) b/ | | | | | |
| 1989 | -0.4 | 0.7 | 0.4 | 0.0 | -5.8 |
| 1990 | -11.8 | -1.1 | -3.3 | -11.6 | -7.4 |
| 1991 | -17.0 | -16.0 | -10.0 | -9.0 | -14.0 |
| Industrial production | | | | | |
| 1989 | -1.1 | 1.1 | -1.0 | -0.5 | -2.1 |
| 1990 | -16.8 | -3.7 | -9.2 | -24.2 | -19.0 |
| 1991 | -27.8 | -21.2 | -19.0 | -11.9 | -18.7 |
| Employment (whole economy) | | | | | |
| 1989 | -2.3 | 0.3 | -0.9 | 0.6 | 1.1 |
| 1990 | -6.1 | -0.4 | -2.0 | -3.6 | 0.2 |
| 1991 | -14.5 | -7.4 | -6.0 | -5.5 | -11.6 c/ |
| Labour productivity in industry | | | | | |
| 1989 | 2.1 | 1.7 | 0.7 | -0.5 | -3.9 |
| 1990 | -8.6 | -0.3 | -0.4 | -19.5 | -18.5 |
| 1991 | -10.9 | -14.4 | -10.2 | -4.9 | -9.2 |
| Nominal wages | | | | | |
| 1989 | 8.8 | 2.3 | 17.9 | 291.8 | 4.0 |
| 1990 | 31.5 | 3.6 | 28.6 | 398.0 | 10.5 |
| 1991 | 152.8 | 16.4 | 27.2 | 71.9 | 333.7 d/ |
| Consumer price index | | | | | |
| 1989 | 5.6 | 1.0 | 17.0 | 251.1 | 0.9 |
| 1990 | 23.8 | 10.0 | 28.9 | 585.8 | 7.4 |
| 1991 | 338.5 | 57.9 | 35.0 | 70.3 | 444.5 d/ |
| Real wages | | | | | |
| 1989 | 3.0 | 1.3 | 1.9 | 9.0 | 3.1 |
| 1990 | 6.2 | -5.8 | -5.1 | -24.4 | 2.9 |
| 1991 | -42.3 | -26.3 | -8.0 | 0.8 | -20.3 d/ |

(Source and footnotes on following page)

(Source and footnotes to table VI.6)

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Source: Department of Economic and Social Development of the United Nations Secretariat, based on OECD, Employment Outlook, July 1992 (Paris, OECD, 1992), p. 240.

a/ Data for 1991 are preliminary estimates.

b/ Net material product (NMP) for Bulgaria and Czechoslovakia prior to 1991.

c/ Employees in the state sector only.

d/ December 1991 compared with October 1990.

However, enterprises in practically all economies in transition still hoard labour. Current estimates are that in 1990, in Czechoslovakia, some 6 per cent of the labour force was hoarded; 21/ in Poland, 20 per cent; 22/ and in the former USSR, about 25 per cent of total employment (about 35-40 million people). 23/

This contradiction may have a number of explanations. First, the initial contraction of output led to a decrease in non-essential staff and part-time employees but did not change the fundamental organization of enterprises. Second, dismissals remained very unpopular and politically difficult, with trade unions resisting them. In many cases, state enterprises tried to avoid lay-offs and absorbed losses for as long as possible, using liquid reserves and amortization funds. Finally, enterprises may have been able to maintain employment at levels higher than strictly necessary by raising profit margins (owing to monopoly strength in internal markets). Price liberalization in goods markets gave these firms an unexpected respite and paradoxically became a factor that slowed down the liberalization of labour markets.

Before the transition began in Eastern Europe and the former USSR, the utilization of labour had nearly reached its demographic limit. Female participation rates were particularly high everywhere. There was persistent excess demand in labour markets. In extreme cases, enterprises were directly responsible for the future employment of workers whom they had dismissed. In the former USSR, this practice was discontinued only in 1986 with the advent of perestroika.

## 2. Profile of unemployment

In Central and Eastern Europe, most job losses in 1990-1991 occurred in industry (mining, manufacturing and electricity, gas and water), but there were also sizeable declines in agriculture (900,000 jobs) and construction (800,000 jobs). 24/ Up to now, the hope that the disproportionately underdeveloped service sector in all former centrally planned economies would become a major source of new jobs has not largely materialized. However, although the labour-absorbing capability of the service sector may have been limited, the share of services in total employment has increased in all countries.

Table VI.5 provides information on open unemployment in transition economies. The actual numbers, reflecting lack of registration among those who lost their right to unemployment compensation because of changes in laws or other administrative action regarding eligibility criteria, may differ from the ones provided in the table. The information on unemployment is largely based on the officially registered.

At the very first stages of transition, new entrants to the labour market, mainly recent school-leavers, represented a larger proportion of unemployed than those released by enterprises. In Czechoslovakia, in mid-1991, the number of jobless school-leavers was estimated to be 10 per cent of the 300,800 unemployed. 25/ In Hungary, of the 406,000 unemployed at the end of 1991, fewer than 1 per cent were new entrants. 26/ Recent increases in the ranks of the unemployed can be largely attributed to the growing number of people losing their jobs. In Poland, for instance, mass lay-offs accounted for about 23 per cent of the unemployed at the end of 1991. 27/

There were significant variations in unemployment according to skill level. Typically, immediately after the introduction of the first phase of the stabilization programme and the changes connected therewith unskilled workers were the first to lose employment. As transition programmes proceeded, unemployment became common among other skill categories. For example, in Hungary, the proportion of unskilled workers dropped from 56 per cent of the total unemployed in 1986 to 32 per cent in 1990. 28/ In December 1991, skilled workers accounted for 40 per cent of all unemployed workers in Hungary, the semi-skilled for 29 per cent and the unskilled for 31 per cent. However, unemployment rates remained much higher among unskilled (31 per cent) than skilled and semi-skilled workers (9 per cent). With the exception of Bulgaria and Romania, unemployment rates among people with vocational training are higher than among those with elementary or secondary education. 29/

In Czechoslovakia, the proportion of unemployed blue-collar workers remained approximately equal to that of white-collar workers throughout 1990; however, with the progress of structural changes, blue-collar unemployment has grown.

In Russia, particularly in major urban centres like Moscow and St. Petersburg, there has been a recent rise in unemployment among clerical and other white-collar workers. There was an obvious mismatch between the skills of released workers and those in demand. In Moscow, at the end of 1991, more than 90 per cent of the city's unemployed were white-collar workers while 85 per cent of the job openings were for blue-collar workers. 30/ Yet as a rule, white-collar workers have had a better chance of finding employment in a short period than blue-collar workers, particularly if they have been willing to undergo additional training. The growing number of redundant workers with higher education and with certain vocational skills has become a feature of unemployment in economies in transition. It reflects previous misallocation in the education sector.

Regional unemployment levels varied significantly. The geographical concentration of unemployment was a sign of low labour mobility and the fragmented nature of national labour markets. Commonly, housing shortages reduced labour mobility. Regions without much industry or with declining industries were hit harder by unemployment. Central areas (including national capitals and environs) experienced less unemployment than other regions. For instance, in Poland, unemployment ranged from 4 or 5 per cent in the province of Warsaw to 17 per cent in some provinces in the north-east part of the country. 31/ In Hungary, the range was from 2-3 to 40 per cent. For Czechoslovakia in 1992, unemployment was about 11 per cent in Slovakia as compared with 6 per cent in Czech lands. Unemployment was higher in Slovakia because of production cuts in heavy industry, including the military sector. 32/ As a rule, areas highly specialized with respect to mining or heavy industry experienced the highest unemployment levels. Regional imbalances in unemployment levels were a factor in rising ethnic tensions and national disintegration.

There are some data that show that the length of time people receive unemployment compensation has recently increased in most East European countries. Despite the relatively short history of open unemployment in those countries, the proportion of registered job seekers with unemployment spells longer than six months was, at the end of 1992, comparable with that in several OECD countries. For example, in Czechoslovakia, workers unemployed for longer than six months increased from 12 to 30 per cent during 1991. In Hungary, the proportion of long-term unemployed was 31 per cent in mid-1991 and rose to 37 per cent by the end of the year. The rise in Bulgaria and Poland was quite high. 33/

Compared with those in other age groups, younger people experienced greater difficulty in finding jobs, and unemployment among them was significantly higher. In Poland and Bulgaria, the incidence of youth unemployment has been especially high. Young inexperienced workers have been also more vulnerable than people in other age groups to longer spells of unemployment.

Growing income differentiation due to the dispersion of wages have made some professions more attractive than others. Those with particularly scarce skills (in management or finance) have been able to improve their position decisively.

### 3. Policy response to unemployment

In the 1960s and 1970s, many attempts at economic reform were abandoned because of fear of mass unemployment and a consequent political backlash. As a result, one of the major concerns of policy makers has been to provide social safety nets (see chap. XI), improve labour markets and enlist the support of the population for socially painful but inevitable labour market reforms.

The creation of institutions intended to cushion the effects of unemployment began immediately after major changes in social and political systems. 34/ In Poland in December 1989, Parliament adopted an Employment Act (amended July 1990) in which it recognized unemployment as a legitimate employment category. In Hungary in February 1991, Parliament passed the New Employment Act providing for unemployment compensation through unemployment insurance. In Czechoslovakia in February 1991, a new Employment Act came into force specifying the rights and obligations of employees and employers. In the former USSR, legislation was adopted in January 1991 laying down the principles of employment policy. The law provided for the creation of mechanisms for registering unemployment and providing those who qualified with unemployment benefits. On 1 July 1991, unemployment was recognized as legal throughout the country for the first time since the 1920s. That law envisaged the adoption of further legislation by each of the constituent republics, which eventually became independent States. So far, parallel laws on employment have been enacted in the Baltic States, Belarus, Kazakhstan, Kyrgyzstan, the Russian Federation and Ukraine. The independent States of Central Asia and the Transcaucasian region have not yet introduced such legislation.

Unemployment compensation schemes also have been set up in several countries. In Poland, a law was adopted in January 1990 introducing an unemployment benefit scheme that would pay 70 per cent of the previous wage for three months, and then fall to 50 per cent for another six months and to 40 per cent thereafter without limit on duration. In Hungary, unemployment compensation laws adopted in January 1989 envisaged paying a maximum of 12 months of benefits to those employed for at least 18 months during the previous three years. The rate was initially fixed at 70 per cent of the previous wage, then fell to 60 per cent after 6 months. The unemployed were required to prove rejection by employers to whom they might have been sent by an employment office. The refusal of a job offer at a wage equal to the benefit was reason for disqualification for benefits.

In the Russian Federation, a worker who is dismissed from work is entitled to severance pay equal to three months salary. Unemployment benefits accrue after the expiration of three months but only if the employment centre has been unable in that time to find the individual employment appropriate to his or her skills and education. A person is not entitled to unemployment benefits if that person left his or her employment voluntarily or was dismissed for disciplinary reasons, or if he or she rejects two suitable employment vacancies proposed by the employment centre.

Those initial provisions were improved upon as the administrations gathered experience. In Poland, for instance, out of 1.2 million registered unemployed in 1991, only 14 per cent had lost their jobs because of enterprise shut-downs, while 40 per cent were school- or college-leavers. Since labour force entrants with no previous employment were eligible for unemployment benefits higher than the minimum wage (as in Hungary and Czechoslovakia also), government labour offices sometimes experienced difficulties persuading people who were out of a job to get off the dole and go to work. 35/ A tightening of rules and the abolition of the original open-ended benefit scheme were necessary to increase incentives to work and to avoid excessive social dependency.

Generally, the maximum duration of benefits did not exceed one year, except (for example, in Hungary and Poland) for workers near retirement age or with long employment records. In Czechoslovakia, the maximum duration of benefits was reduced from one year to six months in January 1992. The level of benefits was made to decrease over time in order to stimulate the search for work. 36/

Finding adequate regular employment for the unemployed became the primary concern of labour centres. In most countries, those offices have been transformed into employment agencies and given additional functions beyond those related to their traditional information services. Major new tasks include help in retraining, administration of the new system of unemployment benefits and provision of legal assistance. In Hungary and Poland, among the responsibilities assigned to the labour offices was the creation of temporary employment in local community projects. 37/

## D. Women's participation in the workforce and unemployment

In developing countries for which there were data, unemployment among women was mostly higher than among men (see table VI.7). The exceptions were Ghana, the Niger, Seychelles and the Sudan in Africa; Puerto Rico and Venezuela in Latin America; and Hong Kong, Pakistan, the Republic of Korea and Singapore in Asia. In French Guyana, Israel, Mexico, Netherlands Antilles, Pakistan, the Philippines, Singapore and Trinidad and Tobago, the female-to-male unemployment ratio declined during the 1980s, indicating a relative improvement in the employment situation of women.

Participation rates of women in the workforce rose in many regions of the world between 1970 and 1990. The exceptions were sub-Saharan Africa, south Asia, south-east Asia and Oceania. Participation of women in all age groups declined in sub-Saharan Africa. In 1990, participation rates were below 25 per cent in south and west Asia and north Africa.

Participation rates of women are particularly sensitive to economic conditions. It has been stated that "women generally continue to be the last to benefit from job expansion and the first to suffer from job contraction". 38/ In OECD countries, the participation rate of women increased from 48.3 per cent in 1973 to 60 per cent in 1990. Participation rates increased during the 1970s and 1980s in all OECD countries, except Turkey, although the rate of increase declined in most countries. The rise of female participation was especially pronounced among women with children. In Canada, the participation of mothers with children under three years of age rose from 32 per cent in 1976 to 56 per cent in 1986. For mothers with children between the ages of three and five, participation rates rose from 41 to 62 per cent, and for those with children between the ages of six and eleven those rates rose from 50 to 68 per cent. Gaps between participation rates of women with younger and older children narrowed in other OECD countries as well. 39/

In the United States, 50 per cent of mothers were working or actively seeking employment within a year of giving birth in 1987 (the figure was up from 31 per cent in 1976). The incentive to stay in the job market was higher for women who had had their first child after turning 30 years of age and for those with more education. Sixty-eight per cent of those women remained active compared with 54 per cent of women 18-24 years of age. Of new mothers with a college degree, 63 per cent remained in the labour force compared with 38 per cent of those whose education had ended in high school. Such women could earn higher incomes than younger and less well-educated ones and pay more for child care. More intense economic necessity was often a motive for early return to the labour force. Sixty-six per cent of widowed, divorced and separated mothers were in the workforce; the figures for married women and single mothers were similar - 49.8 and 49.5 per cent respectively. 40/

Among the developed countries, Finland, Ireland, Malta and the United Kingdom have unemployment rates that are lower for women than for men. In Australia, Canada and the United States, the relative unemployment situation of women was ameliorated from 1981 to 1990, whereas in most European countries there was little change, except for Norway where the situation improved.

### Table VI.7. Female unemployment, and female-to-male unemployment ratio, in selected countries

(Percentage)

| | Female unemployment | | | | | | | Female-to-male unemployment ratio | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1981 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| Africa | | | | | | | | | | | | | | |
| Ghana | 0.6 | 0.2 | 0.1 | .. | .. | .. | .. | 0.46 | 0.29 | 0.13 | .. | .. | .. | .. |
| Niger | 14.2 | 33.2 | 39.1 | 40.5 | 39.3 | 32.9 | .. | 0.35 | 0.58 | 0.75 | 0.81 | 0.77 | 0.69 | .. |
| Seychelles | 1.3 | 31.6 | .. | .. | .. | .. | .. | 0.52 | 1.95 | .. | .. | .. | .. | .. |
| Sudan | .. | 8.8 | 8.0 | .. | .. | .. | .. | .. | 0.67 | 0.55 | .. | .. | .. | .. |
| Latin America | | | | | | | | | | | | | | |
| Argentina | | | | 6.6 | 7.2 | 7.7 | .. | .. | .. | .. | 1.47 | 1.38 | 1.10 | .. |
| Bahamas | .. | .. | 15.0 | .. | 14.2 | 12.5 | .. | .. | .. | 1.55 | .. | 1.73 | 1.14 | .. |
| Barbados | 15.0 | 24.0 | 23.0 | 23.1 | 22.9 | 18.7 | 20.2 | 2.03 | 1.70 | 1.77 | 1.74 | 1.86 | 2.05 | 1.96 |
| Brazil | 4.4 | 3.9 | 2.8 | 4.1 | 4.4 | .. | .. | 1.05 | 1.18 | 1.22 | 1.17 | 1.19 | .. | .. |
| Colombia | .. | .. | 17.2 | 14.8 | .. | 11.8 | 13.2 | .. | .. | 1.72 | 1.76 | .. | 1.74 | 1.63 |
| Costa Rica | 10.4 | 7.9 | 6.8 | 7.9 | 8.0 | 7.8 | 5.9 | 1.27 | 1.22 | 1.13 | 1.68 | 1.82 | 1.50 | 1.40 |
| Chile | 9.9 | 13.4 | 9.7 | 9.3 | 7.8 | 5.7 | 5.7 | 0.83 | 1.15 | 1.15 | 1.27 | 1.39 | 1.10 | 1.02 |
| Guadeloupe | 25.2 | 27.0 | 33.0 | 31.0 | 33.0 | 34.0 | .. | 1.97 | 1.42 | 1.50 | 1.94 | 2.06 | 2.13 | .. |
| French Guiana | 13.7 | 18.5 | 16.7 | 15.4 | .. | 16.8 | 17.6 | 2.74 | 1.76 | 1.82 | 1.83 | .. | 1.79 | 1.50 |
| Jamaica | 38.8 | 35.9 | 33.8 | 30.4 | 27.0 | 25.2 | .. | 2.69 | 2.29 | 2.27 | 2.30 | 2.27 | 2.65 | .. |
| Mexico | 5.6 | 5.7 | 5.3 | 4.8 | 4.5 | 3.6 | 2.9 | 1.60 | 1.63 | 1.43 | 1.41 | 1.50 | 1.38 | 1.21 |
| Netherlands Antilles | | 4.6 | 4.6 | 4.6 | 7.0 | 12.0 | 16.6 | .. | 1.77 | 1.77 | 1.77 | 1.75 | 1.74 | 1.71 |
| Panama. | | 18.5 | 14.5 | 16.8 | 21.4 | 21.6 | .. | .. | 1.95 | 1.67 | 1.79 | 1.53 | 1.58 | .. |
| Peru | | | 8.0 | 6.2 | | 10.7 | .. | .. | .. | 2.35 | 1.63 | ERR | 1.78 | .. |
| Puerto Rico | 14.6 | 16.2 | 13.4 | 12.4 | 10.8 | 10.8 | 10.7 | 0.65 | 0.66 | 0.61 | 0.64 | 0.62 | 0.64 | 0.66 |
| Trinidad and Tobago | 14.6 | 17.0 | 18.9 | 25.3 | 23.6 | 24.5 | .. | 1.70 | 1.13 | 1.15 | 1.22 | 1.12 | 1.18 | .. |
| Uruguay | 9.0 | 16.9 | 15.1 | 12.5 | 12.3 | .. | .. | 1.76 | 1.66 | 1.74 | 1.84 | 1.84 | .. | .. |
| Venezuela | 4.8 | 11.6 | 9.9 | 7.2 | 6.4 | 7.5 | .. | 0.72 | 0.86 | 0.87 | 0.73 | 0.78 | 0.82 | .. |

## Table VI.7 (continued)

| | Female unemployment | | | | | | | Female-to-male unemployment ratio | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1981 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| **Asia** | | | | | | | | | | | | | | |
| China | | 0.9 | 1.0 | 1.0 | 1.0 | 1.3 | 1.2 | .. | 1.50 | 1.67 | 1.43 | 1.43 | 1.00 | 1.33 |
| Hong Kong | 3.1 | 2.6 | 2.5 | 1.8 | 1.4 | 1.1 | 1.3 | 0.82 | 0.74 | 0.83 | 1.06 | 1.00 | 1.00 | 1.00 |
| Israel | 6.4 | 7.2 | 7.9 | 7.3 | 7.6 | 10.3 | 11.3 | 1.49 | 1.14 | 1.22 | 1.40 | 1.33 | 1.30 | 1.35 |
| Japan | 2.1 | 2.7 | 2.8 | 2.8 | 2.6 | 2.3 | 2.2 | 0.91 | 1.04 | 1.04 | 1.00 | 1.04 | 1.05 | 1.10 |
| Korea, Republic of | 2.4 | 2.4 | 2.1 | 1.8 | 1.7 | 1.8 | 1.8 | 0.42 | 0.48 | 0.43 | 0.46 | 0.57 | 0.60 | 0.62 |
| Pakistan | 7.5 | 1.5 | 1.7 | 1.1 | 0.9 | 0.9 | 0.9 | 2.50 | 0.38 | 0.44 | 0.33 | 0.26 | 0.26 | 0.26 |
| Philippines | 8.6 | 8.2 | 8.9 | 10.9 | 9.5 | 10.3 | 9.8 | 2.46 | 1.71 | 1.82 | 1.35 | 1.25 | 1.41 | 1.38 |
| Singapore | 3.4 | 4.1 | 5.5 | 4.0 | 2.6 | 1.9 | 1.6 | 1.21 | 0.98 | 0.79 | 0.78 | 0.68 | 0.83 | 0.94 |
| Thailand | 1.1 | 2.9 | 3.9 | 7.6 | 3.6 | .. | .. | 0.73 | 1.26 | 1.26 | 1.77 | 1.38 | .. | .. |
| Turkey | | 11.1 | .. | .. | 9.6 | 8.8 | .. | .. | 0.98 | .. | .. | 1.25 | 1.05 | .. |
| **North America** | | | | | | | | | | | | | | |
| Canada | 8.3 | 10.7 | 9.8 | 9.3 | 8.3 | 7.9 | 8.1 | 1.19 | 1.04 | 1.05 | 1.09 | 1.12 | 1.08 | 1.00 |
| United States | 7.9 | 7.4 | 7.1 | 6.2 | 5.5 | 5.3 | 5.4 | 1.10 | 1.07 | 1.04 | 1.02 | 1.04 | 1.04 | 1.00 |
| **Europe** | | | | | | | | | | | | | | |
| Austria | 2.7 | 4.7 | 5.2 | 5.7 | 5.6 | 5.5 | 6.0 | 1.23 | 0.96 | 1.02 | 1.04 | 1.10 | 1.20 | 1.22 |
| Belgium | 16.8 | 19.1 | 18.1 | 17.4 | 16.0 | 14.7 | 14.1 | 2.18 | 1.93 | 2.03 | 2.02 | 2.08 | 2.13 | 2.14 |
| Cyprus | 2.9 | 4.2 | 5.0 | 4.7 | 3.8 | 3.3 | 2.5 | 1.21 | 1.45 | 1.72 | 1.74 | 1.73 | 1.94 | 1.79 |
| Denmark | 9.2 | 11.0 | 10.0 | 9.6 | 10.3 | 11.1 | 11.3 | 1.00 | 1.47 | 1.64 | 1.50 | 1.41 | 1.39 | 1.36 |
| Spain | 16.0 | 25.0 | 25.3 | 27.5 | 27.7 | 25.4 | 24.2 | 1.19 | 1.24 | 1.30 | 1.61 | 1.82 | 1.95 | 2.02 |
| Finland | 4.6 | 4.6 | 4.6 | 4.3 | 4.0 | 3.3 | 2.8 | 0.90 | 0.84 | 0.75 | 0.74 | 0.78 | 0.92 | 0.70 |
| France | 10.6 | 12.9 | 13.1 | 13.6 | 13.1 | 12.6 | 12.0 | 2.00 | 1.55 | 1.56 | 1.64 | 1.70 | 1.80 | 1.79 |
| Germany | 6.9 | 10.4 | 10.5 | 10.2 | 10.0 | 9.4 | 8.4 | 1.53 | 1.21 | 1.31 | 1.28 | 1.28 | 1.36 | 1.33 |
| Greece | 5.7 | 11.7 | 11.6 | 11.3 | 12.5 | .. | .. | 1.73 | 2.09 | 2.27 | 2.22 | 2.55 | .. | .. |
| Iceland | 0.6 | 1.3 | 0.8 | 0.6 | 0.9 | 2.2 | 2.2 | 1.50 | 2.17 | 1.60 | 2.00 | 2.25 | 1.69 | 1.57 |
| Ireland | 8.1 | 15.7 | 16.4 | 17.7 | 17.9 | 17.9 | .. | 0.76 | 0.85 | 0.87 | 0.92 | 0.97 | 1.00 | .. |
| Italy | 14.4 | 16.7 | 17.8 | 18.5 | 15.4 | 18.7 | 17.1 | 2.67 | 2.46 | 2.41 | 2.28 | 1.90 | 2.31 | 2.34 |
| Luxembourg | 1.4 | 2.3 | 1.8 | 2.0 | 1.7 | .. | .. | 1.75 | 1.77 | 1.50 | 1.33 | 1.13 | .. | .. |
| Malta | | 7.2 | 6.2 | 3.1 | 3.1 | 2.3 | .. | .. | 0.86 | 0.90 | 0.65 | 0.72 | 0.56 | .. |
| Netherlands | 7.0 | 13.0 | 12.0 | 12.0 | 6.0 | 6.0 | 5.0 | 0.99 | 1.00 | 1.02 | 1.08 | 0.88 | 1.03 | 1.02 |

## Table VI.7 (continued)

| | Female unemployment | | | | | | | Female-to-male unemployment ratio | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1981 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
| Norway | 2.7 | 3.1 | 2.5 | 2.6 | 3.4 | 4.7 | 4.8 | 1.80 | 1.41 | 1.67 | 1.53 | 1.13 | 0.92 | 0.86 |
| Portugal | 13.6 | 11.6 | 10.9 | 9.3 | .. | 7.2 | 6.6 | 3.24 | 1.84 | 1.70 | 1.79 | .. | 2.12 | 2.06 |
| Switzerland | 0.2 | 1.2 | 1.1 | 1.1 | 1.0 | 0.8 | 0.7 | 1.00 | 1.50 | 1.57 | 1.83 | 1.67 | 1.60 | 1.40 |
| Sweden | 1.6 | 2.6 | 2.5 | 2.2 | 1.7 | 1.6 | 1.7 | 0.89 | 1.00 | 1.04 | 1.00 | 0.94 | 1.00 | 0.85 |
| United Kingdom | 6.8 | 9.1 | 9.0 | 7.8 | 6.1 | 4.2 | 3.6 | 0.53 | 0.66 | 0.65 | 0.62 | 0.60 | 0.53 | 0.47 |
| Yugoslavia a/ | 17.5 | 19.1 | 19.0 | 18.5 | 18.7 | 19.3 | .. | 2.08 | 1.87 | 1.83 | 1.81 | 1.72 | 1.65 | .. |
| Oceania | | | | | | | | | | | | | | |
| Australia | 7.4 | 8.8 | 8.7 | 8.6 | 7.9 | 6.9 | 7.2 | 1.54 | 1.11 | 1.13 | 1.10 | 1.16 | 1.21 | 1.07 |
| New Zealand | 4.2 | 4.3 | .. | .. | .. | .. | .. | 1.27 | 1.13 | .. | .. | .. | .. | .. |

Source: Yearbook of Labour Statistics, 1991 (ILO, Geneva, 1991).

a/ Data provided for Yugoslavia refer to the Socialist Federal Republic of Yugoslavia which was composed of six republics.

Working women in all regions of the world receive lower pay than men. The figure for women's earnings expressed as a percentage of men's earnings ranges from about 50 per cent in Japan and the Republic of Korea to about 90 per cent in France, Iceland, Sweden and the United Republic of Tanzania. Women have often undergone less or a different type of education (see chap. IV), usually have less work experience when compared with men and are mostly confined to low-paying occupations. The earnings gap has declined in many developed countries over the last decades. 41/ There is yet some residual gap which can only be attributed to discrimination.

Women fill over half of all clerical, sales and service jobs in the developed countries and Latin America, and more than a third of such jobs in Africa and Asia. Women account for a large share of the labour force in the informal sector and subsistence agriculture, and they are largely excluded from most jobs in transport and management. In manufacturing, women are concentrated in the textile, clothing, leather, footwear, electronics and food-processing sectors. These jobs, which often involve assembly line work, are at the lower end of the pay scale. In export processing zones, 70-90 per cent of the labour force is accounted for by women who are usually young and wage employed for the first time and leave the labour force when they marry. 42/ In developed countries, occupational segregation is slowly changing. In Canada, Sweden and the United States in particular, women have been taking a larger share of professional, management and administrative jobs. 43/

In the economies in transition, women have been particularly vulnerable to unemployment. In Bulgaria, two thirds of the unemployed in 1991 were female. In the former USSR, the share of women among those who lost employment in the period 1989-1991 was 60 per cent. When the state bureaucracy was streamlined in the USSR in the period 1985-1987, more than 80 per cent of those dismissed were women. 44/ In Moscow, about three quarters of those laid off in the industrial sector in 1991 were women. More than half of all unemployed women had higher education. Particularly vulnerable segments of the female population, like single mothers or mothers with several children, accounted for about 2.5 per cent of the unemployed. 45/ In general, there were fewer chances for women to find a new job. Unwillingness of some firms to hire women because of the possible extra costs due to maternity leave may have been a factor in reducing these possibilities.

## E. Policy considerations

Reducing unemployment and raising productivity are essential conditions for eradicating poverty, reducing emigration pressures and mitigating social and political tensions in developing countries. In developed countries, continuing high levels of unemployment have caused much damage to the social fabric, and some of the xenophobia in Western European countries arises from frustrations among the unemployed. In economies in transition, where some unemployment may be inevitable in the process of change-over to a market economy, long periods of unemployment can become a severe political obstacle to further change.

Slower economic growth in the world since 1973, rise in oil prices in the periods 1973-1974 and 1979-1980, deterioration in the terms of trade affecting many developing countries, increase in interest rates causing increased debt service payments and the debt crisis were external factors that limited the capacity of developing countries to create employment. The compelling need to balance the fiscal budget, reform the public sector, privatize enterprises and liberalize trade all contributed to the displacement of labour. While in the long term these policy changes may contribute to more rapid growth both in employment and productivity, the short-term effects, in several instances, were to reduce employment. Without a resumption of economic growth, it is unlikely that the severity of the problems will be reduced.

Because a majority of low-productivity employment is in agriculture and the informal sector, government policies should target those two sectors in order to improve standards of living. Smallholders in agriculture are in general as efficient as large farmers and productivity is mainly limited by limited access to input. Smallholders, especially women, often have inadequate access to credit, fertilizer, improved seeds, extension services, transportation, infrastructure, marketing and irrigation systems. Frequently, many of these input factors are in poor condition and involve a bias against smallholders. Little progress has been made in bringing about low-risk and cheap innovations apt for risk-averse poor peasants. Investments in research, human and physical capital, infrastructure and institutions are necessary for such productivity increases to come about. These areas constitute public goods and enjoy economies of scale and externalities. Governments should therefore encourage, finance and sometimes undertake such investments. 46/

Some of these measures, in particular those focusing on infrastructure, transport and credit can also benefit non-agricultural sectors. Productivity increases in agriculture have positive impacts on rural non-agricultural employment. 47/ Rising productivity and incomes can help the growth of rural industry and the development of small towns. To achieve these goals, many countries have embarked on small-scale, labour-intensive public employment programmes to construct, rehabilitate or maintain roads, irrigation canals, water-supply systems, schools and soil conservation schemes (see chap. VII). 48/

While it was well understood that in developing countries the creation of employment depended on investment and long-term changes, demand management had been a successful means of maintaining high employment levels over short periods in developed countries until the 1970s. That policy prescription ran into trouble in the 1970s, when inflation and unemployment occurred at the same time, and the new phenomenon was termed stagflation.

Price stability became the prime objective of economic policy in the short run. Unemployment was to be reduced by eliminating labour market imperfections, some of them due to government intervention and regulation. Real wages might have been too high to clear the market for labour. When oil prices rose in the 1970s and real incomes fell in OECD countries, real wages had to fall to maintain employment. There is some evidence that this did not occur in many European OECD countries during the 1970s, in contrast with what happened in Japan. 49/ Wage rigidity may have been due to minimum wage legislation, labour unions and labour contracts that lasted over several years. However, it can be argued that even if wages were flexible, employers might not hire more labour because worker productivity is linked to wage levels, because turnover costs are high or because employers fear that applicants who ask for lower wages are less competent. Other factors that raise the cost of labour for the employer are taxes on employment, social security and health insurance payments, and the size and duration of unemployment benefits.

Additionally, over time there have been higher unemployment rates for a given number of vacancies. The upward shift is usually taken to be a result of increasing frictional unemployment, which is unemployment resulting from the time it takes for a person to move from one job to another. Frictional unemployment can rise because of the increasing mismatch between skills demanded and offered, because of the lack of information about demand and supply or because of the refusal of workers to move to places where there is work. However, by themselves these factors explain only a part of the increase in unemployment.

Governments shifted increasingly from demand management and income maintenance programmes to active labour market policies to bring groups of unemployed back into the labour market. Even when unemployment rates declined in the second half of the 1980s, labour market programmes were largely maintained or expanded. Those programmes sought to reduce the mismatch between demand and supply by providing education and training (especially for the unemployed and those at risk) and by subsidizing both unemployed persons starting businesses and employers (to encourage hiring). These policies promoted on-the-job training, supported the disabled and disseminated information on job opportunities.

In addition, labour regulations have been revised in several OECD countries in three areas. Some countries have revised minimum wages and wage-setting and bargaining arrangements. Several countries have revised legislation regarding employment and redundancies, including early retirement. For instance, in the United Kingdom, rules regarding redundancies have been eased, while in Japan they have been tightened. Finally, in order to redistribute employment, work time has been reduced in Germany and the Netherlands, either by cutting the number of hours worked per week or days worked per year or by encouraging early retirement. 50/

Some have argued that policies to increase flexibility and deregulation have resulted in an increase in the share of marginal, low-paying, precarious jobs in total employment. At least half of all employment created in the 1980s in France, Germany, the Netherlands, Luxembourg and Spain was based on temporary contracts, often arranged by temporary-work agencies. The percentage share of part-time employment in total employment increased in almost all OECD countries during the 1980s, remaining low in southern Europe. In the Scandinavian countries, Luxembourg and the United States, part-time employment among women declined, in particular during the second half of the 1980s, but women continued to account for more than 60 per cent of all part-time employees in all OECD countries in 1990. Finally, the share of self-employment, in particular that represented by own-account workers, in total employment increased in several countries during the 1980s. 51/ However, the changes may have other explanations. Self-employment and part-time, fixed-term and temporary jobs are not always involuntary and are partly determined by changed circumstances. The use of information technology permits telecommuting (see chap. XV) where people may perform from home functions that they performed earlier in an office. Parents with young children, especially if single, may find working from home more congenial.

In the economies in transition, the ability to re-employ the workforce quickly and productively depends on the success of market-oriented reforms, including the growth of the private sector. The role of government is particularly important in identifying the population groups most vulnerable to unemployment and in adopting preventive measures. Governments can also provide help in increasing labour mobility, including help to the workforce in areas affected by serious economic decline. Providing labour market information is one of the most important measures. Reforms in the housing sector to create a better market is another. Training and retraining should focus on both adult workers and new entrants who experience difficulties in finding suitable employment. In the new economy, cooperation with private sector employers is of particular importance. However, as in other groups of countries, a rapid expansion of the demand for labour is essential to ease the severity of problems of unemployment and underemployment.

## Notes

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3/ Economic and Social Commission for Asia and the Pacific (ESCAP), Economic and Social Survey of Asia and the Pacific, 1991, (New York, United Nations, 1992), p. 107.

4/ Susan Horton, Ravi Kanbur and Dipak Mazumdar, "Labour markets in an era of adjustment: evidence from 12 developing countries", International Labour Review, vol. 130, Nos. 5-6 (1991), p. 546.

5/ ILO/JASPA, op. cit., pp. 33-34.

6/ ILO, World Labour Report, 1989 (Geneva, ILO, 1989), p. 49.

7/ ILO/JASPA, op. cit., pp. 28-29.

8/ Calculations of the Department of Economic and Social Development of the United Nations Secretariat, based on ILO, Yearbook of Labour Statistics, 1991 (Geneva, ILO, 1991).

9/ ILO/JASPA, op. cit., p. 31.

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12/ Jacques Charmes, "A critical review concepts, definitions and studies in the informal sector", in The Informal Sector Revisited, David Turnham, Bernard Salomé and Antoine Schwarz, eds. (Paris, Organisation for Economic Cooperation and Development (OECD) 1990), pp. 10-48; and ILO, World Labour Report, 1992, (Geneva, ILO, 1992), pp. 39 and 44.

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15/ This paragraph and the previous one were based mainly on recent editions of OECD, Employment Outlook (Paris, OECD).

16/ OECD, Employment Outlook, July 1992 (Paris, OECD, 1992), p. 249.

17/ Zycie Gospodarcze (Warszwa), 23 February 1992, p. 15.

18/ Joint statistical publication of Czechoslovakia, Hungary and Poland: Bulletin (Budapest), vol. 1, No. 1, 1991.

19/ International Labour Review, vol. 130, No. 2 (1991), p. 217.

20/ Ekonomicheskaya Gazeta (Moscow), No. 6 (February 1992), p. 13.

21/ M. Kàpal, M. Sojka and T. Tepper, "Unemployment and market-oriented reform in Czechoslovakia", International Labour Review, vol. 130, No. 2, p. 220.

22/ M. Gora, "Shock therapy for the Polish labour market", International Labour Review, vol. 130, No. 2 (1991), p. 151.

23/ A. Shohin and V. Kosmarskyi, "USSR labour market in the period of transition" (in Russian), Voprosy Economiki, Moscow, No. 9 (1991), p. 4.

24/ OECD, Employment Outlook, July 1992 (Paris, OECD, 1992), p. 243.

25/ Report of the Federal Office of Statistics, Czechoslovak Economic Digest (Prague), No. 4 (1991), p. 15.

26/ Heti Világgazdaság (Budapest), 25 January 1992, p. 8.

27/ OECD, OECD Economic Surveys, Poland 1992 (Paris, OECD, 1992), p. 26.

28/ A. Hàrs and G. Nagy, "Hungary faces unemployment", International Labour Review, vol. 130, No. 2 (1991), p. 169.

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30/ I. Zaslavskyi, "O pol'ze rynka truda" ("About the usefulness of the labour market"), Voprosy Economiki (Moscow), No. 9 (1991), pp. 33-34.

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32/ Czechoslovak Economic Digest (Prague, 1991), No. 2, p. 24.

33/ OECD Employment Outlook, July 1992 (Paris, OECD, 1992), p. 254.

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35/ The Economist (London), 4 May 1991, p. 52.

36/ OECD, Employment Outlook, July 1992 (Paris, OECD, 1992), p. 258.

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38/ The World's Women, 1970-1990, Trends and Statistics (United Nations publication, Sales No. E.90.XVII.3), p. 83.

39/ OECD, Employment Outlook, July 1991 (Paris, OECD, 1991), p. 31.

40/ The New York Times, 16 June 1988.

41/ Morely Gunderson, "Male-female wage differentials and policy responses", Journal of Economic Literature, vol. 27, No. 1 (March 1989), pp. 46-72; and The World's Women ....

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43/ ILO, World Labour Report, 1992 (Geneva, ILO, 1992).

44/ Pravitel'svennyui Vestnik (Moscow), No. 40 (September 1991), p. 14.

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46/ Sartaj Aziz, Agricultural Policies for the 1990s (Paris, OECD, 1990); and Uma Lele, Agricultural Growth, Domestic Policies, the External Environment and Assistance to Africa: Lessons of a Quarter Century, Managing Agricultural Development in Africa (MADIA) Discussion Paper, No. 1 (Washington, D.C., The World Bank, 1989).

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47/ Steven Haggblade, Peter Hazell and James Brown, "Farm-nonfarm linkages in rural sub-Saharan Africa", World Development, vol. 17, No. 8 (August 1989), pp. 1173-1201.

48/ International Labour Review, vol. 131, No. 1 (1992).

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# Chapter VII

# INCOME DISTRIBUTION AND POVERTY

It is a widespread impression that the retardation of the world economy in the 1980s and the new economic policies that were put in place all over the world have produced greater inequality, both between rich and poor countries and between rich and poor people everywhere.

This chapter examines the evidence on inequality of income and on the incidence of poverty in the world, in developing countries, and in the economies in transition. It does not focus on income distribution within the industrial countries, however urgent that has become. It is thoroughly analysed and debated in those countries themselves.

This examination confirms that there has been increasing - but not uniform - polarization in living conditions. Rapid economic progress in many Asian countries, notably China, has reduced measures of inequality among countries in the world and lessened the incidence of poverty in Asia. In both developed and developing countries, women have fallen into poverty at a significant rate.

The inadequacy of the statistical evidence must be borne in mind. Even where official statistics about income distribution exist, illegal and unreported economic activities may make for a very different situation. Household surveys exist in only a few countries. Poverty lines are inevitably somewhat arbitrary, and small changes might increase or reduce considerably the estimates of those living in poverty. However, even after such caveats, the available information confirms the impression that income distribution became more inequitable in most of the countries where national income declined or stagnated in the 1980s. In other cases, it is relevant to ask which policies have proved successful in maintaining an equitable distribution of income and what has been the experience of sacrificing equity for efficiency.

## A. Distribution of world output by regions

Even a cursory look at world output (and thus income) and population immediately illustrates the disparities between rich and poor countries of which everybody is well aware. In 1981, the developed market economies, with 17 per cent of world population, generated 72 per cent of world output. Developing countries had 74 per cent of the world's population and 15 per cent of world output (table VII.1). These figures imply that the average per capita output in the developed countries was 20 times as high as that in the developing countries. As table VII.1 shows, the share of output for the developed market economies in 1991 had grown, and the share of population for the developing countries had also grown. The ratio of the average per capita output in developed countries to that in developing countries had risen to 22 in the course of the decade. Having grown at roughly comparable rates during the 1970s, developing countries grew apart during the 1980s (see fig. VII.1). Countries in South and East Asia maintained the growth momentum of the previous decade, while other regions experienced a sharp deceleration.

### Table VII.1. Share of country groups in population, GDP and world exports

(Percentage)

| Country group | Share of population 1981 | 1991 | Share of GDP a/ 1981 | 1991 | Share of exports 1980 | 1989 |
|---|---|---|---|---|---|---|
| Developed market economies | 17.2 | 15.5 | 71.7 | 73.0 | 62.6 | 70.0 |
| G-3 b/ | 9.1 | 8.4 | 44.8 | 46.7 | 27.2 | 32.3 |
| Developing countries | 74.3 | 77.3 | 15.2 | 16.5 | 29.7 | 23.2 |
| Africa | 10.1 | 11.6 | 1.7 | 1.6 | 4.7 | 1.8 |
| Mediterranean | 1.6 | 1.5 | 0.7 | 0.6 | 0.7 | 0.6 |
| South Asia and East Asia | 53.3 | 54.2 | 5.4 | 8.0 | 8.2 | 13.3 |
| Western Asia | 1.2 | 1.4 | 2.6 | 2.0 | 10.6 | 3.5 |
| Western hemisphere | 8.2 | 8.5 | 4.8 | 4.3 | 5.5 | 4.0 |
| Economies in transition c/ | 8.4 | 7.2 | 13.1 | 10.6 | 7.7 | 6.8 |
| Former USSR | 6.0 | 5.4 | 9.5 | 8.0 | 3.8 | 3.6 |
| Memorandum items: | | | | | | |
| 15 heavily indebted d/ | 11.1 | 11.5 | 5.3 | 4.6 | 7.5 | 5.4 |
| 4 newly industrializing countries e/ | - | - | 1.3 | 2.0 | 3.8 | 8.1 |
| China | 22.4 | 21.5 | 1.3 | 2.4 | 1.0 | 1.8 |
| India | 15.9 | 16.3 | 1.2 | 1.5 | 0.4 | 0.5 |
| Least developed countries | 7.7 | 8.5 | 0.5 | 0.5 | 0.5 | 0.3 |
| Sub-Saharan Africa (excluding Nigeria) | 7.0 | 8.0 | 0.6 | 0.6 | 1.2 | 0.7 |

Source: Department of International and Social Affairs of the United Nations Secretariat and United Nations Conference on Trade and Development, Handbook of International Trade and Statistics, 1990.

a/ Based on 122 countries. GDP estimates at constant US dollars of 1988.

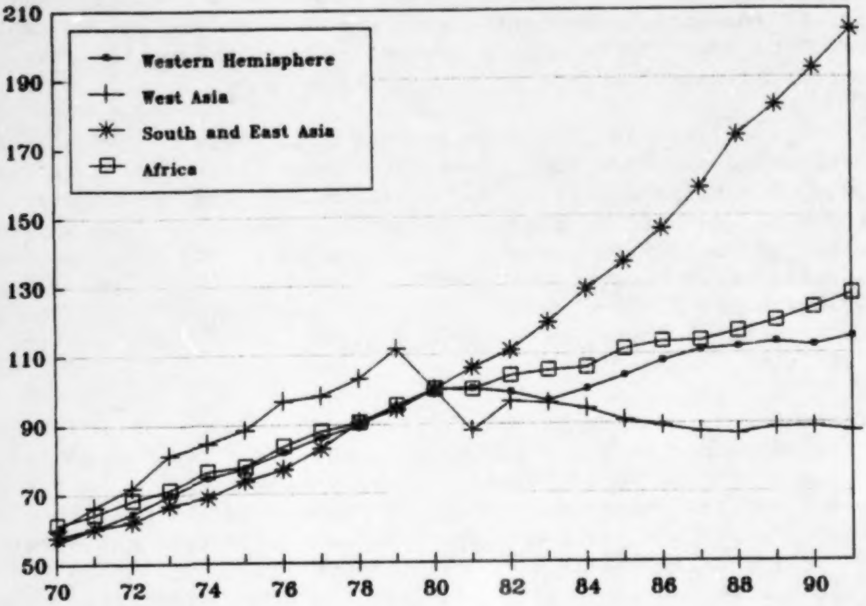
b/ Germany, Japan and the United States of America.

c/ In Europe, not including Yugoslavia. Data concerning the former German Democratic Republic were included in the economies in transition up to 1989. Beginning in 1990 the data were transferred to the developed market economies group, reflecting German reunification.

d/ Argentina, Bolivia, Brazil, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, Philippines, Uruguay, Venezuela, Yugoslavia.

e/ Hong Kong, Republic of Korea, Singapore, Taiwan Province of China.

Figure VII.1. Indices of real GDP in developing countries, 1970-1991



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Source: Department of Economic and Social Development, United Nations Secretariat.

Note: 1980 = 100.

One approach to the explanation of these differences starts from the rates of growth of inputs of labour and capital. However, such growth accounting leads to a large residual, since the rate of growth of inputs is not high enough to account for the rate of growth of output. This productivity growth has been variously attributed to technological progress, availability of adequate infrastructure, the education and skills of the labour force, its capacity to absorb new technology, managerial flexibility and government policies.

Investment declined in the 1980s in both Latin America and Africa in contrast with South and East Asia where investment rates were maintained or rose. 1/ Many countries in Africa and Latin America had to cut imports due to foreign exchange constraints, thereby reducing access to new technology and more efficient production processes. A decline in employment, especially in the more productive sectors of the economy, also contributed to slow growth. In contrast, with higher investment and higher employment, there was also higher growth in total factor productivity in the newly industrializing countries of Asia. 2/

The economies in Eastern Europe and the former Union of Soviet Socialist Republics, which accounted for 8 per cent of the world population in 1981, generated 13 per cent of world output in that year but only 11 per cent in 1991 (see fig. VII.1). There were dramatic changes in the political and economic environment in these countries. Industrial output was severely hit, as the old trading arrangements collapsed. Severe disruptions in the system of distribution affected the supply of fuels and other essential inputs. The dissolution of the former USSR in 1991 compounded the region's economic problems. Regional GDP contracted by about 16 per cent in 1991. 3/

## B. Intercountry distribution of income in the 1980s

Table VII.2 presents some indicators of the distribution of world output and income among countries. Three measures were used: gross domestic product (GDP), gross national product (GNP - i.e., the GDP adjusted for net factor payments abroad), and gross national income (GNI - i.e., the GNP adjusted for changes in terms of trade). These alternative measures were used to verify whether factor payments and terms of trade losses had a significant impact on the world distribution of income. For instance, one might expect that the distribution of GNP and gross national income would be more uneven than the distribution of world GDP and GNP, respectively, since debt service payments increased and the relative prices of developing countries' exports deteriorated during the decade 1981-1991.

The sample of 97 countries includes both market economies and economies in transition. Estimates of income per capita in national currency were converted into United States dollars using official exchange rates. The use of official exchange rates may distort the outcome somewhat but is unlikely to affect the direction of change in the indicators. 4/ The economies were ranked in order of GDP per capita. 5/ Deciles of world population were ranked by per capita GDP. Where the population of one country exceeded a decile, the balance was carried over to the next higher decile. Lorenz curves were constructed for the resulting cumulative distributions and the coefficients of variation and Theil and Gini indices calculated. It is worth noting that this

Table VII.2. Estimates of inequality in the distribution of world a/ income, 1981, 1985 and 1989

| | 1981 | 1985 | 1989 |
|---|---|---|---|
| GDP per capita | | | |
| Coefficient of variation | 1.69 | 1.73 | 1.78 |
| Gini | 0.7285 | 0.7288 | 0.7324 |
| Theil | 0.7906 | 0.7965 | 0.7993 |
| GNP per capita | | | |
| Coefficient of variation | 1.72 | 1.76 | 1.81 |
| Gini | 0.7321 | 0.7328 | 0.7361 |
| Theil | 0.7994 | 0.8048 | 0.8081 |
| GNI per capita | | | |
| Coefficient of variation | 1.71 | 1.75 | 1.80 |
| Gini | 0.7298 | 0.7305 | 0.7357 |
| Theil | 0.7875 | 0.8007 | 0.8064 |

Source: Department of Economic and Social Development, United Nations Secretariat, based on international and national sources.

Notes: The coefficient of variation is obtained by dividing the standard deviation of the distribution by the mean.

The Gini coefficient varies between 0 and 1. The lower the coefficient, the closer the distribution is to equality.

The Theil (T) index varies from 0, when incomes are distributed equally, to the logarithm of the number of income recipients when all incomes accrue to one recipient and none to others.

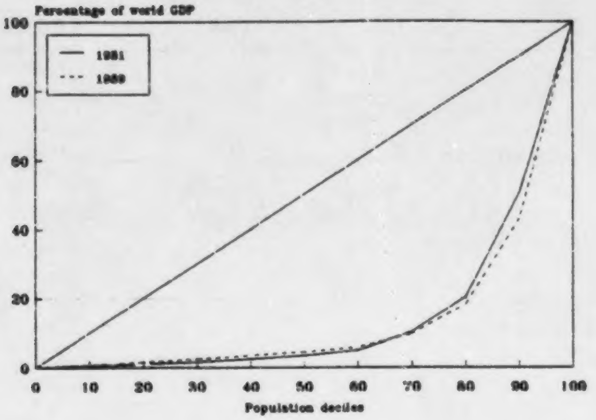
a/ Based on a sample of 97 countries.

exercise does differ from that of estimating income inequality within a country: GDP is not conceptually the same as household or personal income used in those estimates.

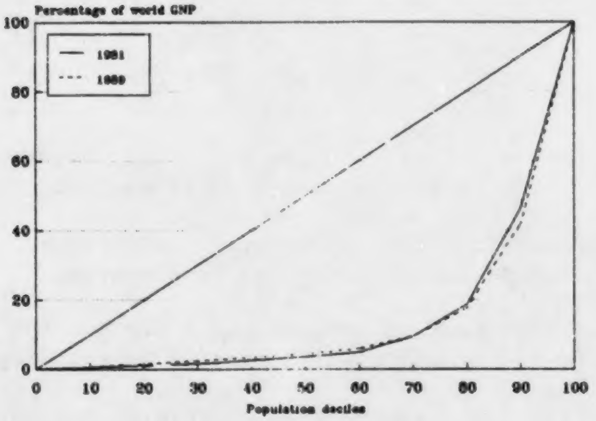
The Gini and Theil coefficients, whichever output concept was used, increased over the past decade, as did the coefficient of variation. However, the changes are small, and these results were not confirmed by shifts in the Lorenz curves. As shown in figure VII.2, the Lorenz curves of distribution of output in 1981 and 1989 crossed each other and did not uniformly lie one above the other. However, it is evident that there were changes in the distribution during the decade.

**Figure VII.2. Lorenz curves of distribution of world GDP, GNP and GNI among countries, 1981, 1989**

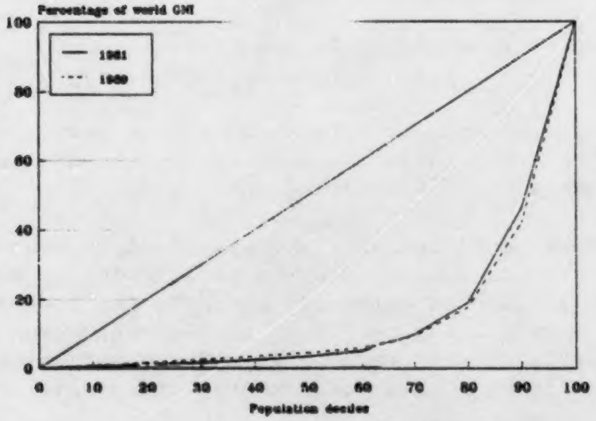
Distribution of world GDP



Distribution of world GNP



Distribution of world GNI



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Source: DESD.

Table VII.3 shows the changes in income shares of population deciles in 1981, 1985 and 1989. The bottom five deciles, when considered as a block, consistently increased their income share during the period, largely due to fast growth in China and India. Given the weight of its population, the influence of Chinese economic growth on this distribution is considerable. As China moves out of the first decile into higher deciles, the rate at which the first population decile gains in output share decelerates. In fact, from 1985 to 1989, the output share of the lowest population decile either stagnated or was slightly reduced (see table VII.3). 6/ In 1989, this decile was dominated by people in sub-Saharan Africa and Bangladesh.

The top population decile increased its share of world output significantly during the period. This share increased from about 53 per cent to 58 per cent from 1981 to 1989. Relatively strong economic growth in the United States of America and Japan accounted for most of the gain.

Population deciles 6-9 lost output shares. All deciles in those groups lost at least 10 per cent of their respective share in the total world output. The seventh decile lost the most in relative terms: about 20 per cent during the period. This decile contains the population of middle-income developing countries, mainly in Latin America. In some of them, economic difficulties were compounded by civil strife. Population in the ninth decile had their share of output fall from about 27 per cent in 1981 to 24 per cent in 1989. Output losses in this decile were due to the drastic fall in per capita income in oil-exporting countries and the relatively slow growth in developed countries in the decile.

In sum, some of the bottom and top deciles gained output shares, leaving the middle deciles squeezed. Income disparities within deciles remained substantial. Despite impressive growth in China and India, the five bottom population deciles continued to have an average per capita output no more than 10 per cent of the world average per capita output and 1.25 per cent of the per capita output of the top decile (see fig. VII.3).

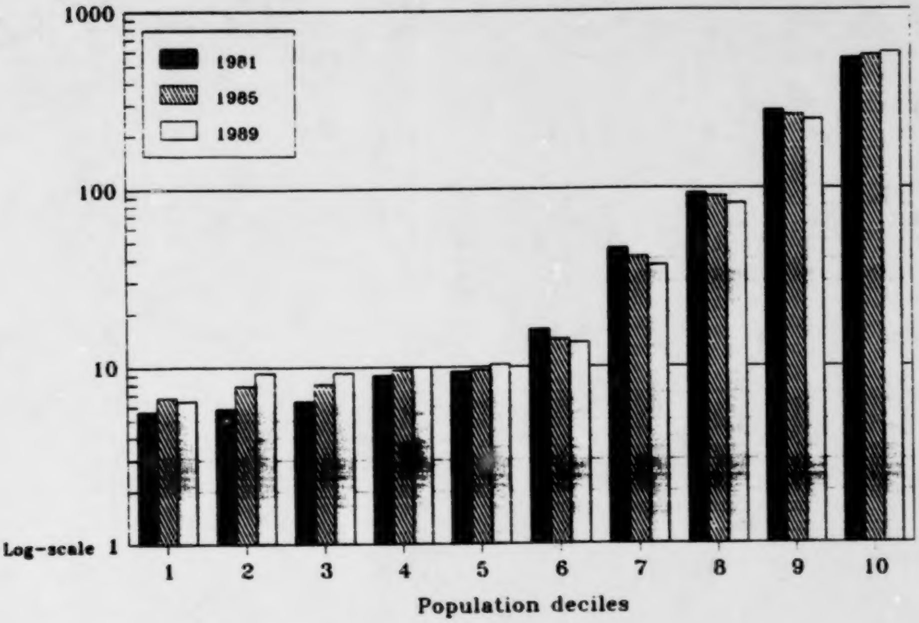
Differences in rates of growth of output (GDP) and of population account for the changes in the distribution of output among population deciles (see table VII.4). Although output itself grew faster in developing countries than in developed countries, 1972-1991, population grew nearly three times faster in the former than in the latter. Rates of growth in output in developing countries in 1972-1981 were high enough, despite high population growth, to ensure a rate of growth of per capita output higher in developing countries than in developed. During 1982-1991, the average annual rate of growth of output in developing countries fell (by almost one third), from 4.9 per cent to 3.6 per cent. In developed countries, the same rate fell (by one eighth), from 3.2 per cent to 2.8 per cent. The rate of growth of output per capita in developing countries was only about half that in developed countries during 1982-1991. Among developing countries, Asian economies generally grew faster during 1982-1991 than during 1972-1981; growth in China was markedly faster. In other developing countries, especially Africa, Latin America and West Asia, the rate of growth of output during 1982-1991 was sharply lower than during 1972-1981. At the same time, population grew much more slowly in Asia than in Africa and West Asia. Consequently, per capita income in Latin America was lower in 1991 than in 1982, and in Africa, it was lower than in 1972.

Table VII.3. Distribution of world output, 1981, 1985 and 1989

| | 1981 | | 1985 | | 1989 | |
|---|---|---|---|---|---|---|
| Population Deciles | Income Share | Cumulative Share | Income Share | Cumulative Share | Income Share | Cumulative Share |
| | | | Gross domestic product | | | |
| 1 | 0.54 | 0.54 | 0.66 | 0.66 | 0.66 | 0.66 |
| 2 | 0.56 | 1.10 | 0.77 | 1.43 | 0.91 | 1.57 |
| 3 | 0.62 | 1.72 | 0.78 | 2.21 | 0.91 | 2.48 |
| 4 | 0.89 | 2.61 | 0.93 | 3.14 | 1.00 | 3.48 |
| 5 | 0.90 | 3.51 | 0.96 | 4.10 | 1.02 | 4.50 |
| 6 | 1.54 | 5.05 | 1.43 | 5.53 | 1.39 | 5.89 |
| 7 | 4.73 | 9.78 | 4.25 | 9.78 | 3.82 | 9.71 |
| 8 | 9.67 | 19.45 | 9.39 | 19.17 | 8.54 | 18.25 |
| 9 | 27.67 | 47.12 | 25.90 | 45.07 | 24.71 | 42.96 |
| 10 | 52.88 | 100.00 | 54.93 | 100.00 | 57.04 | 100.00 |
| | | | Gross national product | | | |
| 1 | 0.56 | 0.55 | 0.65 | 0.65 | 0.64 | 0.64 |
| 2 | 0.56 | 1.11 | 0.78 | 1.43 | 0.92 | 1.56 |
| 3 | 0.63 | 1.74 | 0.78 | 2.21 | 0.92 | 2.48 |
| 4 | 0.90 | 2.64 | 0.94 | 3.15 | 1.00 | 3.48 |
| 5 | 0.93 | 3.57 | 0.96 | 4.11 | 1.02 | 4.50 |
| 6 | 1.46 | 5.03 | 1.37 | 5.48 | 1.37 | 5.87 |
| 7 | 4.59 | 9.62 | 4.10 | 9.58 | 3.69 | 9.56 |
| 8 | 9.12 | 18.74 | 8.87 | 18.45 | 8.16 | 17.72 |
| 9 | 27.62 | 46.36 | 25.60 | 44.05 | 24.28 | 42.00 |
| 10 | 53.64 | 100.00 | 55.95 | 100.00 | 58.00 | 100.00 |
| | | | Gross national income | | | |
| 1 | 0.56 | 0.56 | 0.67 | 0.67 | 0.64 | 0.64 |
| 2 | 0.58 | 1.14 | 0.78 | 1.45 | 0.93 | 1.57 |
| 3 | 0.64 | 1.78 | 0.80 | 2.25 | 0.92 | 2.49 |
| 4 | 0.90 | 2.68 | 0.96 | 3.21 | 1.00 | 3.49 |
| 5 | 0.94 | 3.62 | 0.97 | 4.18 | 1.02 | 4.51 |
| 6 | 1.62 | 5.24 | 1.42 | 5.60 | 1.36 | 5.87 |
| 7 | 4.56 | 9.80 | 4.10 | 9.70 | 3.69 | 9.56 |
| 8 | 9.33 | 19.13 | 8.99 | 18.69 | 8.19 | 17.75 |
| 9 | 27.36 | 46.49 | 25.73 | 44.42 | 24.34 | 42.09 |
| 10 | 53.51 | 100.00 | 55.58 | 100.00 | 57.91 | 100.00 |

Source: Department of Economic and Social Development, United Nations Secretariat, based on international and national sources.

Figure VII.3. Decile average per capita income as a percentage of world average per capita income, 1981, 1985, 1989



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**Source**: Department of Economic and Social Development, United Nations Secretariat.

Table VII.4. Rates of population and output growth, 1972-1991

| | Population | | Real GDP | | Real GDP per capita | |
|---|---|---|---|---|---|---|
| | 1972-1981 | 1982-1991 | 1972-1981 | 1982-1991 | 1972-1981 | 1982-1991 |
| Developed market economies | 0.8 | 0.8 | 3.2 | 2.8 | 2.4 | 2.0 |
| Developing economies | 2.2 | 2.1 | 4.9 | 3.6 | 2.7 | 1.5 |
| Latin America | 2.4 | 2.1 | 5.2 | 1.5 | 2.8 | -0.6 |
| Africa | 2.9 | 3.1 | 4.5 | 2.4 | 1.6 | -0.7 |
| Sub-Saharan Africa | 2.9 | 3.2 | 2.4 | 1.6 | -0.5 | -1.6 |
| West Asia | 3.6 | 3.5 | 3.4 | 0.2 | -0.2 | -3.3 |
| South and East Asia | 2.3 | 2.3 | 5.9 | 5.9 | 3.6 | 3.6 |
| China | 1.7 | 1.4 | 5.6 | 8.9 | 3.9 | 7.5 |

Source: Department of Economic and Social Development, United Nations Secretariat.

In general, developing economies grew more slowly than developed economies in the decade of the 1980s and at roughly half the rate at which they grew in the 1970s (see table VII.4). As a source of final demand, exports provided very strong positive impulses in South Asia and South-East Asia and moderately positive impulses in Latin America. In contrast, the impulses were negative in both Africa and Western Asia. Both volume and price indices of exports from those countries were substantially lower in 1990 than in 1980. 7/

In sub-Saharan Africa, during 1980-1990, gross domestic investment fell by 4.3 per cent per annum, and in Latin America and the Caribbean, by 2.0 per cent per annum. The most precipitous declines - exceeding 10 per cent per annum - were in the Congo, Côte d'Ivoire and Nigeria in Africa and Bolivia and Panama in Latin America and the Caribbean. Consumption grew on average at 0.8 per cent per annum in sub-Saharan Africa, with a sharp drop of 3.3 per cent per annum in Nigeria. 8/

The volume of imports fell at an annual rate of 4.3 per cent in sub-Saharan Africa and 2.1 per cent in Latin America during the decade 1980-1990. The sharpest decline was in Nigeria - 15.1 per cent per annum. 9/

The scarcity of imports reduced current production and income generation by starving enterprises of vital imports and by denying machinery and equipment for investment. Tariff reforms and steep devaluations raised domestic prices of imports to make certain enterprises inviable. In the mid-1980s, in Zambia, structural adjustment programmes were reported to have reduced capacity utilization in five less efficient industrial establishments from 56 per cent to 25 per cent. In Côte d'Ivoire, Ghana, Nigeria and Zambia, capacity utilization was reported to have gone down substantially during structural adjustment programmes. 10/

Major changes in the international economy during the 1980s constrained the growth of many developing countries. A persistent drop in the prices of exports and in international terms of trade, a massive net transfer of resources to developed countries from developing countries, and slow expansion of exports of manufactures, because of slow growth and market protection policies in developed countries, contributed to the slow growth of the developing economies.

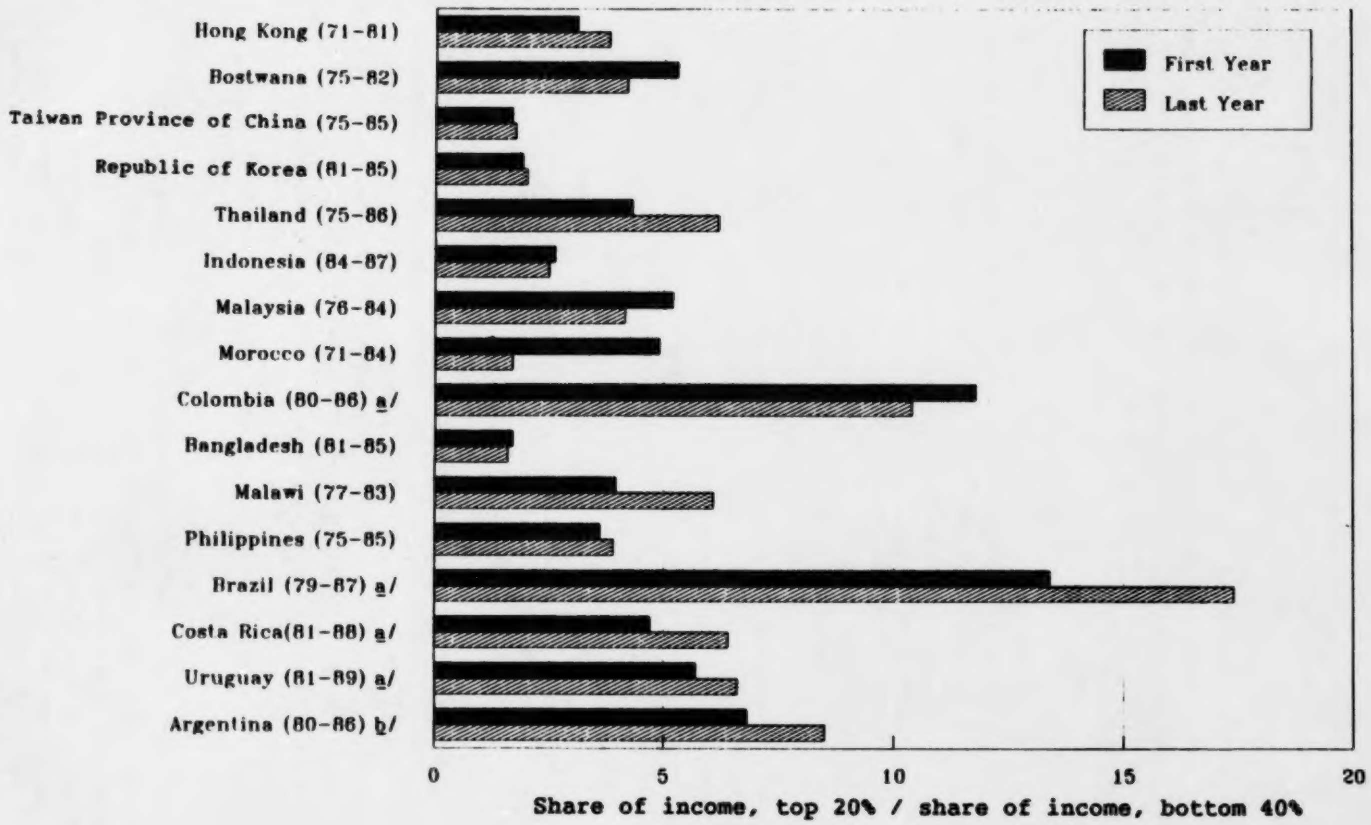
Domestic policies aimed at providing unsustainable rates of growth produced domestic price instability and repeated devaluation, which resulted in capital flight. Policies of taxation, producer and consumer subsidies, the protection of domestic industrial activity and complex regulations impaired flexibility in the economy, reduced productivity and stifled enterprise. The painful stabilization policies and structural adjustment programmes were designed to correct those imbalances in the economy, establish price stability, promote flexibility in the economy, raise productivity and, in the long term, increase income and welfare of the people. To raise capacity utilization and investment, it would have been essential to release restrictions on import capacity, given the current structure of those economies. That, in turn, would have required both an expansion in the demand for their exports at higher prices and an augmented flow of capital into those economies.

## C. Recent trends in income distribution within developing countries

Figure VII.4 provides some indication of the wide inequalities in income distribution and recent changes in their distribution in 16 developing countries. Out of the 16 countries in the sample, in eight (Argentina, Brazil, Costa Rica, Hong Kong, Malawi, Philippines, Thailand, Uruguay), the distribution of income became more unequal; in four, there was movement towards less inequality (Botswana, Colombia, Malaysia, Morocco); and in another four (Bangladesh, Indonesia, Republic of Korea, Taiwan (Province of China), income distribution remained relatively stable during the years indicated.

At the very outset, it is useful to advise some caution in the use of these figures. Data presented in figure VII.4 do not permit rigorous intercountry comparison and analysis for several reasons: the recipient unit may be an individual or a household; households contain varying numbers with diverse relevant characterisitcs; income may be disposable, permanent, or current and may or may not include income in kind. The size and the kind of sample used to originate the data also differ. Moreover, although care was

## Figure VII.4. Changes in income distribution in selected developing countries



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Source: Department of Economic and Social Development, United Nations Secretariat, based on international and national sources.

Note: Countries are listed by descending order of the average annual rate of GDP growth.

a/ Urban population only.

b/ Metropolitan population only.

taken to select countries in which the income concept and the recipient unit were the same in both initial and final years, the data may be problematic even within the same country due to divergences in geographical coverage and sampling techniques. Yet, these are the best estimates available and will be used in this chapter, with the foregoing caveats in mind.

### 1. Determinants of the changes in income inequality

Long-term changes in income distribution within countries have been explained as resulting from the process of economic development. The so-called Kuznet hypothesis maintains that inequality tends to worsen during early stages of development and that this tendency is reversed later as lower income groups become more integrated into the urban economy, wages are lifted up with growth in employment and wage earners acquire stronger bargaining power. This hypothesis has been subject to intense debate both because of problems in modelling the complex relationships and the poor quality and scant availability of data. Yet, the controversies have helped identify some factors relevant to changes in the distribution of income, including intersectoral income differentials, labour movements and intrasectoral income differences.

Households in agriculture received lower incomes than those in the rest of the economy (see table VII.5). The differentials are generally higher in developing than in developed countries, except in France, Italy and Japan. Argentina in 1989 is the one exception, where output in agriculture grew faster than in the rest of the economy. However, agriculture absorbed only 12 per cent of the labour force in Argentina. In the rest of the economy, income distribution probably worsened, certainly so in the metropolitan area where about 25 per cent of the Argentine population lived. 11/ Intersectoral income disparities seem to be larger in Africa than in other regions. However, the national accounts data from which these disparities are estimated do not adequately take into account the contribution of the subsistence sector, where a significant share of African agricultural labourers is engaged. It is fair to add a similar caveat regarding incomes generated in the informal urban sector, which are not negligible in countries where that sector absorbs a large share of the urban labour force. Table VII.5 is to be read with these reservations in mind.

Intersectoral income disparity increased in many countries including Cameroon, the Republic of Korea and Thailand. In all these countries, the share of agriculture in GDP fell by more than 5 percentage points. There was no comparable reduction in the agricultural labour force. In contrast, intersectoral inequality decreased in Algeria, Argentina and Nigeria, where the share of agriculture in GDP increased. These reductions in intersectoral disparity may have been overtaken by increasing inequality within each sector. For instance, it has been argued that the decline in the urban/rural disparity in Nigeria was accompanied by a process of generalized and steep impoverishment of the Nigerian population and a marked deterioration in living standards among the poor. 12/

Intersectoral income differentials are a principal reason why people abandon the rural areas and migrate to cities. Most frequently, migrants find work in the lower paid segments of the urban sector which absorbs unskilled

### Table VII.5. Output a/ per worker in the rest of the economy as a percentage of output per worker in agriculture, selected countries, 1980 and 1989

| Country | Proportion of labour force in agriculture | | Proportion of agricultural output in GDP | | Average income non-agriculture/ Agriculture (agriculture = 100) | |
|---|---|---|---|---|---|---|
| | 1980 | 1989 | 1980 | 1988 | 1980 | 1989 |
| | (percentage) | | (percentage) | | | |
| **Africa** | | | | | | |
| Madagascar | 69.0 | 67.6 | 36 | 35 | 396 | 387 |
| Kenya | 61.2 | 59.1 | 28 | 26 | 406 | 411 |
| Cameroon | 60.2 | 59.0 | 27 | 19 | 409 | 613 |
| Zaire | 59.6 | 58.3 | 26 | 25 | 420 | 419 |
| Zimbabwe | 58.4 | 56.8 | 13 | 12 | 939 | 964 |
| Sudan | 56.7 | 55.1 | 33 | 29 | 266 | 300 |
| Zambia | 56.3 | 54.5 | 14 | 17 | 791 | 585 |
| Nigeria | 55.0 | 53.6 | 21 | 42 | 460 | 160 |
| Cote d'Ivoire | 52.8 | 51.5 | 31 | 28 | 249 | 273 |
| Ghana | 45.0 | 43.9 | 44 | 38 | 104 | 128 |
| Egypt | 37.2 | 36.3 | 20 | 19 | 237 | 243 |
| Morocco | 35.2 | 34.2 | 18 | 17 | 247 | 254 |
| Tunisia | 27.3 | 26.5 | 14 | 12 | 231 | 264 |
| Algeria | 23.3 | 22.4 | 6 | 9 | 476 | 292 |
| **Asia** | | | | | | |
| India | 59.5 | 58.4 | 34 | 29 | 285 | 344 |
| Thailand | 58.9 | 57.7 | 23 | 17 | 480 | 666 |
| Sri Lanka | 47.1 | 46.4 | 26 | 23 | 253 | 290 |
| Indonesia | 47.2 | 46.1 | 24 | 24 | 283 | 271 |
| Pakistan | 43.2 | 42.1 | 26 | 24 | 216 | 230 |
| Philippines | 42.3 | 41.3 | 23 | 23 | 245 | 236 |
| Malaysia | 33.1 | 32.2 | 22 | 21 | 175 | 179 |
| Republic of Korea | 29.9 | 29.3 | 15 | 10 | 242 | 364 |
| **Latin America** | | | | | | |
| Guatemala | 45.1 | 43.8 | 25 | 26 | 246 | 222 |
| Honduras | 44.5 | 42.9 | 22 | 18 | 284 | 342 |
| Peru | 31.8 | 31.0 | 10 | 8 | 420 | 517 |
| Mexico | 28.3 | 27.5 | 8 | 8 | 454 | 436 |
| Colombia | 27.6 | 26.9 | 19 | 17 | 163 | 180 |
| Brazil | 26.1 | 25.5 | 10 | 8 | 318 | 394 |
| Costa Rica | 24.5 | 23.9 | 18 | 18 | 148 | 143 |
| Uruguay | 14.9 | 14.8 | 10 | 9 | 158 | 176 |
| Chile | 13.6 | 13.3 | 7 | 7 | 209 | 204 |
| Argentina | 11.9 | 11.8 | 9 | 12 | 137 | 98 |

Table VII.5 (continued)

| Country | Proportion of labour force in agriculture 1980 (percentage) | 1989 | Proportion of agricultural output in GDP 1980 (percentage) | 1988 | Average income non-agriculture/ Agriculture (agriculture = 100) 1980 | 1989 |
|---|---|---|---|---|---|---|
| Developed countries | | | | | | |
| Australia | 6.0 | 5.9 | 5.22 | 4.22 | 116 | 142 |
| France | 8.0 | 8.0 | 4.23 | 3.51 | 197 | 239 |
| Germany | 5.6 | 5.6 | 2.05 | 1.61 | 283 | 363 |
| Italy | 11.4 | 11.4 | 5.75 | 3.68 | 211 | 337 |
| Japan | 10.4 | 10.3 | 3.68 | 2.55 | 304 | 439 |
| Sweden | 5.5 | 5.5 | 2.22 | 2.68 | 256 | 211 |
| Switzerland | 5.9 | 5.9 | 4.00 | 3.00 | 150 | 203 |
| United Kingdom | 2.5 | 2.5 | 1.84 | 1.43 | 137 | 177 |
| United States of America | 3.2 | 3.1 | 3.00 | 2.00 | 107 | 157 |

Source: Department of Economic and Social Development, United Nations Secretariat, based on UNCTAD, Handbook of International Trade and Development Statistics (various issues).

a/ Estimates based on GDP by kind of economic activity.

labour in construction, retail, trade and the like. Alternatively, they join the urban informal sector as street vendors, domestic servants, employees in small shops and others. The informal sector itself is far from homogeneous and harbours wide disparities in income. Where entry is easy, incomes are low and provide an alternative to unemployment. Other occupations, where some capital and skills are required, offer higher incomes and are preferred to employment in the formal sector. 13/

## 2. Latin America and the Caribbean

In Latin America, the impact of the crisis was heaviest on the urban poor earning minimum wages and on the informal sector. In addition, those in salaried employment were impoverished not merely due to a decline in salaries but also to the decline in the quantity and the quality of the services provided to the urban population. 14/ A telling instance of the consequences of this decline was the outbreak of cholera in Peru in 1990. In some Latin American countries, employment in the public sector continued to grow despite the economic crisis; adjustment came in the form of lower wages and salaries. During the period 1980-1987, employment in the public sector expanded by 32 per cent, while wages declined by 17 per cent in real terms. 15/ In Brazil and Peru during the past decade, wages of civil servants were either frozen or raised at rates lower than in other sectors. A combination of wage repression and the creation of unskilled jobs, mostly in public works, to mitigate the negative effect of adjustment on the poor, reduced average wages in the public sector. 16/ In some other countries, including Colombia, Uruguay and Venezuela, public-sector employment was cut more deeply than manufacturing jobs in the private sector. The informal sector, in some instances, absorbed labour expelled from the formal sector. In Latin American countries, average income in non-agricultural employment fell by more than 40 per cent in real terms between 1980 and 1987. In the organized sectors of the economy, the drop in real wages ranged from 10 per cent in manufacturing to 16 per cent in construction. 17/

As the relative shares of the lower- and middle-income strata dropped, distribution became more polarized. In seven Latin American countries for which there are data, the share of the top quartile of income receivers in urban areas in total income increased in Argentina, Brazil, Costa Rica, Uruguay and Venezuela. In Colombia, in contrast, inequality seems to have decreased during the past decade. In contrast with other countries, there was continuous growth in Colombia, and those earning minimum wages did not suffer real income losses.

Accelerating inflation and repeated devaluations gave people with access to foreign exchange opportunities to increase their wealth in domestic currency. 18/ Unlike wages and salaries, interest rates were maintained at high levels to secure subscription to the public debt and to support the exchange rate. In some countries, attractive money interest rates were fully indexed against inflation, ensuring a transfer of income to those holding government paper.

The experience in Ecuador diverged from that in most other countries in Latin America. Although all classes suffered income losses during stabilization, most of its negative impact fell on the urban rich and the medium-income recipients. A large share of their income is derived from wages of skilled labour which were severely curtailed. The urban and rural poor were adversely affected by the contraction of the urban economy since two thirds of the income of the rural poor originates in non-agricultural activities. The medium- and large-scale farmers suffered the least fall in income. 19/ In Mexico, it was the urban upper-income classes and workers in the informal sector who bore most of the adverse consequences of adjustment during the period 1980-1986. The steep decline in the consumption of manufactured goods hit the former and the shrinkage in the urban economy hit the latter. 20/ Changes in the structure of consumption and outmigration from the countryside led to higher incomes in all rural social groups. Land owners, both large- and small-scale farmers, gained more than landless labourers. The decrease in the rural/urban gap led to a more equitable income distribution in Mexico. 21/

In general, rural income recipients fared better than the urban. Yet, inequality in rural areas in the region may have increased. The ownership of land is much more concentrated in Latin America than in other developing regions. The Gini coefficient of land concentration was 0.84 in Latin America in the mid-1970s, 0.57 in Asia and 0.43 in sub-Saharan Africa. 22/ In most of Latin America, the rural population is mostly landless labour.

During the decade, land owners benefited greatly. The wages of agricultural landless workers fell in real terms by 20 per cent. In both rural Brazil and Venezuela, the income share of the top quartile of income recipients increased, to the detriment of the other three. The Gini coefficient of income distribution in the rural area worsened sharply in both countries, in Brazil from 0.41 in 1979 to 0.47 in 1987, in Venezuela from 0.29 in 1981 to 0.37 in 1986. 23/

### 3. Africa

In Africa, urban groups, particularly wage earners and workers in the informal sector, bore the brunt of adjustment burdens. There is also some evidence that the decline in urban incomes led to a reduction in the rural/urban income gap. However, African economic problems were not touched off by the world economic recession of the early 1980s and the debt crisis. Economic decay had been present since the mid-1970s with declining exports, food production per capita, terms of trade and per capita output. However, the situation undoubtedly worsened in the 1980s.

Unemployment increased in many African countries (see chap. VI). Given the dependence of African manufacturing on imported inputs and an increasingly tight foreign exchange constraint, output fell in many industries and the work force was reduced accordingly. In countries for which there are statistics (Ghana, Nigeria, Sierra Leone and Tunisia), a large share of the unemployed had been previously engaged in manufacturing. Most losses of manufacturing jobs took place during the early 1980s, and employment in the sector recovered somewhat after the mid-1980s in Benin, Burundi, Ghana, Malawi, Niger and the United Republic of Tanzania. In some other countries, the demand for labour in manufacturing remained constrained for a much longer period. For instance, by 1986-1987, Nigerian manufacturing industries were operating at 35 per cent of their capacity and in branches of manufacturing particularly dependent on imported inputs, capacity utilization was at 20 per cent. Unemployment among skilled workers, which was uncommon during the boom years of the Nigerian economy, became acute. 24/ Employment in construction fell by more than 30 per cent in Mauritius, Niger, Swaziland, the United Republic of Tanzania and Zambia and by over 20 per cent in Benin, Kenya and Malawi during 1980-1985, mainly on account of cuts in public investment. 25/ Employment in construction recovered in some countries after 1985. 26/ Government-sector employment continued to grow at least during the first half of the decade. Adjustment came in the form of lower wages. In Egypt, employment in government (excluding public enterprises) increased by 44 per cent during the period 1976-1986, while real average wages in the sector declined by 29 per cent. Later, attempts were made to restrain the growth of employment in the sector. Recruitment was frozen in Benin, Gambia, Mauritania, Sierra Leone, Somalia and the United Republic of Tanzania. Temporary staff was laid off, and the practice of guaranteeing employment to secondary school or university graduates was discontinued in several other countries. 27/

Even if employment in the public sector was not drastically reduced, the same is not true for the supply of public services. A number of services previously provided by the State at zero or minimum cost to consumers have been privatized or been otherwise charged for. In many countries, the quality of public services deteriorated. Services at public hospitals in Morocco now need to be paid for, and the decay of public schools has led to the emergence of private schools with high fees, beyond the reach of the majority of the population. 28/ Cuts in government consumer subsidies also adversely affected urban incomes. In Madagascar, the reduction in the subsidies for domestically produced and imported rice was especially hard on the poorest 25 per cent of the residents of the capital whose per capita rice consumption shrank by 31 per cent, compared to a 15 per cent average decline in urban areas. 29/ In sum, reductions in the quality and quantity of the services provided by the State entailed losses in standards of living of urban populations (where the supply of public services is usually concentrated) in addition to the more readily accounted for losses in real wage incomes.

Losses in real wages were considerable in Malawi, Sierra Leone and the United Republic of Tanzania and less steep in Egypt, Kenya and Zimbabwe (see table VII.6). In manufacturing, the decline in real wages was greater for skilled workers. 30/ Although there are no data covering earnings in the informal sector, incomes probably fell as the purchasing power of the rest of the urban population was reduced.

However, urban wage earners are a small minority in many African countries. About 70 per cent of the African labour force are smallholder farmers producing food (most of it for subsistence) or cash crops. It has been often argued that the rural sector was less adversely affected by adjustment policies in the 1980s than the urban economy, because some measures were adopted to reduce previously existing biases against agriculture. Furthermore, it has been argued that the relative autonomy of the subsistence sector provided a cushion against economic deterioration. Therefore, income distribution may have become less unequal in African countries as urban incomes fell steeply and rural incomes stagnated.

There is evidence that adjustment measures did have an adverse impact on rural incomes in some countries and that in others, income inequality in the countryside increased. Rural household incomes are not exclusively derived from farming. They are complemented with earnings from wage labour, rural non-farm activities, occasional work in the informal urban sector and remittances from the urban sector. 31/ Approximately 20 per cent of crops produced in subsistence farming are traded for cash or for products from cities. Consequently, one may expect the decline in economic activity in urban areas to affect rural incomes adversely. There is some evidence that agricultural wages declined in real terms during the 1980s. In the reduced sample of countries presented in table VII.6, only in the Seychelles did agricultural wages experience real gains during the 1980s.

This may help explain why in Côte d'Ivoire it was the food producers who suffered the largest losses in real per capita income between 1980 and 1985. 32/ Producers of export crops, however, gained from changes in government policy, improving producer prices for coffee and cocoa. This situation probably reversed itself at the end of 1989 as cocoa and coffee prices collapsed in international markets and the Government was forced to adjust official producer prices accordingly.

In Malawi, income distribution probably worsened in the rural sector. Government pricing and credit policies contributed to this. Relatively larger farms sold their output at auction prices, which were higher than the prices paid by the Agricultural Development and Marketing Corporation to others. Further, technology and credit packages sponsored by the Government were more readily available and more suitable for large farms. 33/

Table VII.6. Real wages in agricultural and non-agricultural activities in selected African countries

| Country | Non-agriculture 1985 | Non-agriculture 1989 | Agriculture 1985 | Agriculture 1989 |
|---|---|---|---|---|
| Botswana a/ | 118 | 119 | 78 | 92 |
| Burundi | 113 | 106 | 78 a/ | 72 b/ |
| Egypt c/ | 98 | 89 b/ | 130 | 92 b/ |
| Ghana | 87 | 144 | 92 | .. |
| Kenya | 83 | 93 | 78 | 97 |
| Malawi | 76 | 55 | 90 | 54 |
| Seychelles a/ | 109 | 115 b/ | 119 | 140 b/ |
| Sierra Leone | 26 | 14 b/ | .. | .. |
| Swaziland a/ | 101 | 87 b/ | .. | .. |
| United Republic of Tanzania a/ | .. | 26 b/ | 81 | .. |
| Zimbabwe | 80 | 87 b/ | .. | .. |

Source: Department of Economic and Social Development, United Nations Secretariat, based on ILO, Yearbook of Labour Statistics; IMF, International Finance Statistics (various issues); and World Bank, "Egypt: alleviating poverty during structural adjustment" (1991).

Note: 1980 = 100.

a/ 1981 = 100.

b/ 1987.

c/ 1982 = 100.

Similar results may have been obtained in Ghana. Ghana cocoa growers benefited from increased producer prices and improved export infrastructure. These gains were heavily concentrated, since 32 per cent of cocoa farmers received 94 per cent of the gross cocoa income in 1987. 34/

### 4. South Asia and South-East Asia

The experience was more varied in South Asia and South-East Asia where output grew faster in the 1980s. Unemployment was lower and real wages increased in several countries (see table VII.7). However, agricultural products, fuels and other minerals still account for a considerable share of exports of a number of countries, including Indonesia, Malaysia, Myanmar, Nepal, Sri Lanka and Thailand. They had to contend with low prices and stagnant demand. India, Pakistan, the Philippines and Sri Lanka had to adjust to a declining supply of foreign exchange and a lower demand for contract labour in West Asia from the mid-1980s, a problem that was aggravated by the Persian Gulf conflict (see chap. II). Balance-of-payments problems

**Table VII.7.** Real wages and unemployment rate in selected Asian countries

| Country | Manufacturing | | Agriculture | | Unemployment rate | | |
|---|---|---|---|---|---|---|---|
| | 1985 | 1989 | 1985 | 1989 | 1980 | 1985 | 1988 |
| Bangladesh | 68 a/ | .. | 107 a/ | .. | .. | .. | .. |
| China b/ | 100 | 110 | 100 | 101 | 4.9 | 1.8 | 2.0 c/ |
| Hong Kong d/ | 111 | 132 | .. | .. | .. | 3.2 | 1.4 |
| Republic of Korea | 130 | 198 | 106 | .. | 5.2 | 4.0 | 2.5 |
| Philippines | 89 | 111 e/ | 97 | 110 e/ | 4.8 | 6.1 | .. |
| Sri Lanka | 88 | 89 f/ | 96 | 102 f/ | .. | .. | .. |
| Thailand | 174 | .. | .. | .. | 1.3 g/ | 2.6 | .. |
| Malaysia | .. | .. | .. | .. | 4.7 | 6.9 | 8.7 e/ |
| Pakistan | .. | .. | .. | .. | 3.6 | 3.7 | 3.1 |
| Singapore | .. | .. | .. | .. | 3.0 | 4.1 | 3.3 |

Source: Department of Economic and Social Development, United Nations Secretariat, based on data from ILO, Yearbook of Labour Statistics (various issues).

Note: Real wages: 1980 = 100.

a/ 1984.

b/ 1985 = 100.

c/ Urban only.

d/ 1982 = 100.

e/ 1987.

f/ 1988.

g/ 1981.

temporarily affected other countries in the region as well. However, in general, adjustment measures were implemented without major output losses. The reasons for this are twofold: first, external shocks were milder in Asia than elsewhere; secondly, macroeconomic disequilibria were also relatively smaller. Consequently, adjustment in the region did not require sustained cuts in demand as in most of Latin America and Africa. 35/

Deliberate distributive policies implemented by government and growth patterns which provided widespread employment were also instrumental in reducing inequality. Land reforms in China, including Taiwan Province, and the Republic of Korea in the late 1940s and early 1950s secured reasonable equality in asset distribution in rural areas. Income distribution improved during the 1960s and the 1970s. Recently, there has been some signs of a slight increase in inequality (see fig. VII.4).

In Malaysia, the Gini coefficient of income distribution deteriorated after independence from 0.42 in 1957-1958 to 0.53 in 1976 and improved to 0.48 in 1984. 36/ A good part of the credit goes to the New Economic Policy adopted in 1970. Its priorities were the eradication of poverty and the increased ownership by Malays and other indigenous people of the country's wealth. The redistribution of property was to take place partly at the expense of foreign interests. Formal sector employment was to reflect the country's ethnic composition, and education policies were designed to support such outcome.

It is probable that inequality may have increased after 1987. The Malaysian economy had been cushioned from the global recession of the early 1980s by an increase in government expenditure. As the public-sector deficit increased, especially after the fall in oil prices reduced government revenue, expenditure was cut back. The construction boom subsided and unemployment increased, reaching 9 per cent in 1987, up from less than 5 per cent in 1982.

In Hong Kong, the tax structure is highly progressive, and government expenditure favours low-income groups. Shifts in income distribution in Hong Kong were also sensitive to the waves of immigration, mainly from China. The influx of unskilled labour contributes to slowing down wage increase even in the periods of prosperity and to increasing the gap, on the one hand, between unskilled and skilled labour and, on the other hand, between the remuneration of labour and capital. 37/

In Singapore, as in Hong Kong, the post-tax distribution of income is less unequal than the pre-tax one as the result of progressive taxation and government expenditure on housing and education. Income inequality also declined during the 1970s with the massive creation of low-skilled jobs in the labour-intensive export manufacturing sector. But income inequality may have increased in the first half of the 1980s as the economy underwent rapid changes. In the fast-growing financial, business service and construction sectors, wages were higher than in other sectors. 38/

In Sri Lanka, a long-running movement towards greater equality was reversed in 1977. The Government shifted from import substitution into export promotion. Although the economy grew at faster rates after the change in policy, benefits from accelerated growth tended to go to upper-income groups.

Many small- and medium-sized firms collapsed due to competition from abroad. The low-income groups were also adversely affected by the suspension of price controls and food subsidies. Benefits from a food stamp programme introduced in 1979 were quickly eroded by inflation. The Gini coefficient of income concentration rose from 0.41 in 1973 to 0.52 in 1981/82. 39/ Although there is no comparable data for the most recent period, it is probable that the distribution of income became more uneven as underemployment and unemployment rose. Unemployment rose to 18 per cent in 1986, and wages in both agriculture and manufacturing declined in real terms during the period 1981-1987. Agricultural wages recovered somewhat in 1988 (see table VII.7). Wages in the formal sector were partially protected from erosions in purchasing power. From 1980 to 1988, wages of government employees even increased by 30 per cent in real terms while wages of workers in rice production declined by 10 per cent. 40/ A programme (*janasaviya*), launched in 1989 to transfer substantial incomes to households in poverty with incentives to save and invest out of such transfers, may have raised incomes at the bottom substantially but cannot be confirmed as yet.

In Indonesia, government policies were successful in improving the distribution of income during a programme of stabilization and structural change. Income distribution became slightly less uneven, with the Gini coefficient declining from 0.34 in 1976 to 0.32 in 1987. The Government had established a social infrastructure to provide health and educational facilities, especially in rural areas and to women, before the new policies came into effect. The budget deficit was reduced mainly by cutting capital outlay (large capital and import intensive projects) and by freezing civil servants' salaries from 1985 to 1988. Adjustment costs were mostly borne by the urban population, specifically government employees and educated youth, as job opportunities dwindled in the public sector. The heaviest burden fell on protected sectors with rental incomes. 41/ Both employment and wages in manufacturing continued to expand as labour-intensive export industries grew. In the rural areas, wages and employment continued to grow during the period. The economy grew at 4.6 per cent per annum during the 1980s. 42/ It is pertinent to observe that Indonesia continued to have access to private capital markets despite a rising external debt and debt service payments and that there was strong support by the donor community which helped reduce the need for expensive commercial borrowing and higher debt service charges.

### 5. China

Income distribution in China probably became more uneven after the economic reforms in 1978 and 1985. Income differentiation was seen as a means to stimulate individual initiative. Prior to the reforms, income inequality among households was very low, although regional differences did exist. 43/ Annual average output grew during the 1980s at 9 per cent. Income disparities increased among both households and regions. 44/

Although access to land is guaranteed to every rural household, the yield from that land depends closely on the quality of the land and the working capacity of each household. Families with young children, elderly persons and/or disabled persons receive lower incomes. One objective of the reforms was to raise procurement prices for agricultural products as an incentive to increase output. The increases penalized net purchasers of these products.

However, with the emergence of township and peasant enterprises (collectively or individually owned), some of the rural labour force found jobs in non-farm activities where productivity and incomes are higher than in the farm sector.

Income disparity is believed to have widened at the regional level as well. Fast growth in the special economic zones has also provided wages at much higher levels than in the rest of the economy.

## D. Poverty in the 1980s

Some 1,100 million people in developing countries - one in every five people in the world - lived in poverty in 1985 (see table VII.8). Some three quarters of the poor, 57 per cent of the world population, live in South Asia and East Asia. Sub-Saharan Africa has the second largest number living in poverty; 50 per cent are below the poverty line. In West Asia, North Africa and the developing countries of Europe, 60 million, almost one out of three, live in poverty. In Latin America and the Caribbean, poverty affects about 20 per cent of the population, some 75 million people. 45/

A person is considered poor if the total of his/her income earnings from the various assets he/she commands - such as land, capital and labour - do not allow that person a minimum nutritionally adequate diet and other essential non-food requirements. In rural areas, poverty is concentrated in households that are landless or have insufficient land and whose wage income is not enough to pull them out of poverty. The poor in the urban areas hold unstable, low paying jobs, generally in the informal sector. 46/

Of the 1,100 million poor, some 60 per cent are considered to be extremely poor, barely able to meet their minimum nutritional needs. Inadequate caloric intake makes them prone to disease which, in turn, weakens their working capacity. A disproportionate share of them comprise women and children. They lack access to social services such as basic health and education and also to credit, information and improved technology. Consequently, they are unable to enhance their earning capacity.

During the past decade, poverty increased in Africa and Latin America both in absolute and relative terms. In contrast, poverty declined in Asia. Much of that improvement occurred in China. In Latin America, the advance that the years of rapid growth had brought to poverty alleviation during the 1970s was lost in the 1980s. The region entered the 1980s with an estimated 35 per cent of households living in poverty, down from 40 per cent in 1970; it closed the decade with 37 per cent of households and 44 per cent of the total population in poverty (see table VII.9). 47/ The increase in poverty was the result of the overall slowdown of economic activity under adverse external economic conditions and of policy responses to those conditions. 48/ Urban unemployment increased, and real wages declined. Employment generated during the decade was less productive, less stable and less well paid. There also emerged a category of "new poor", whose income was originally somewhat above the poverty line and who used to have access to housing, education and health services. Their stable sources of income were lost in the course of the crisis.

In Latin America, poverty increased mainly in urban areas. Reversing the earlier trend, in 1986 the 94 million urban poor were more numerous than the 76 million rural poor. With few exceptions, the share of households in poverty in rural areas was stable or decreased, despite sluggish economic growth. Yet, rural areas continued to host the vast majority of the extremely poor, whose incomes would not purchase the minimum basket of food.

### Table VII.8. Incidence of poverty in developing regions

| Region | Percentage of population living below poverty line | | Number of people living below poverty line | |
|---|---|---|---|---|
| | 1985 | 2000 a/ | 1985 | 2000 a/ |
| South Asia and East Asia | 31 | 13 | 805 | 435 |
| Latin America and the Caribbean | 19 | 11 | 75 | 60 |
| Middle East, North Africa and developing Europe | 31 | 23 | 60 | 60 |
| Sub-Saharan Africa | 47 | 43 | 180 | 265 |
| Total | 33 | 18 | 1 120 | 820 |
| Memo items: | | | | |
| China | 20 | 3 | 210 | 35 |
| India | 55 | 25 | 420 | 255 |

Source: World Bank, World Development Report, 1990 (Oxford and New York, Oxford University Press, 1990), table No. 9.2, p. 139.

a/ Projections.

## Table VII.9. Estimates of households living in poverty in Latin America and the Caribbean

(Percentage)

| Country | Year | Urban areas | Rural areas | Total |
|---|---|---|---|---|
| Western hemisphere | 1970 | 26 | 62 | 40 |
| | 1980 | 25 | 54 | 35 |
| | 1986 | 30 | 53 | 37 |
| | 1989 a/ | 31 | 54 | 37 |
| Argentina | 1970 | 5 | 19 | 8 |
| | 1980 | 7 | 16 | 9 |
| | 1986 | 12 | 17 | 13 |
| Brazil | 1970 | 35 | 73 | 49 |
| | 1979 | 30 | 62 | 39 |
| | 1987 | 34 | 60 | 40 |
| Colombia | 1970 | 38 | 54 | 45 |
| | 1980 | 36 | 45 | 39 |
| | 1986 | 36 | 42 | 38 |
| Costa Rica | 1970 | 15 | 30 | 24 |
| | 1981 | 16 | 28 | 22 |
| | 1988 | 21 | 28 | 25 |
| Chile | 1970 | 12 | 25 | 17 |
| | 1987 | 37 | 45 | 38 |
| Guatemala | 1980 | 41 | 79 | 65 |
| | 1986 | 54 | 75 | 68 |
| Mexico | 1970 | 20 | 49 | 34 |
| | 1977 | .. | .. | 32 |
| | 1984 | 23 | 43 | 30 |
| Panama | 1979 | 31 | 45 | 36 |
| | 1986 | 30 | 43 | 34 |
| Peru | 1970 | 28 | 68 | 50 |
| | 1979 | 35 | 65 | 46 |
| | 1986 | 45 | 64 | 52 |
| Uruguay | 1981 | 9 | 21 | 11 |
| | 1989 | 10 | 23 | 15 |
| Venezuela | 1970 | 20 | 36 | 25 |
| | 1981 | 18 | 35 | 22 |
| | 1986 | 25 | 34 | 27 |

Source: ECLAC, "Panorama social de América Latina" (LC/G.1688, October 1991), table 7, p. 49; and ECLAC/UNDP, "Magnitud de la pobreza en América Latina en los años ochenta" (April 1990).

a/ Estimates.

Where the burdens of adjustment were reasonably equally shared, poverty increased only moderately. In Costa Rica, poverty affected 25 per cent of the population in 1988, a small increase from the 22 per cent registered in 1981. In contrast, in Chile where adjustment measures reduced incomes of the poorer half of the population, twice as many people were in poverty in 1987 as in 1970 (see table VII.9). 49/

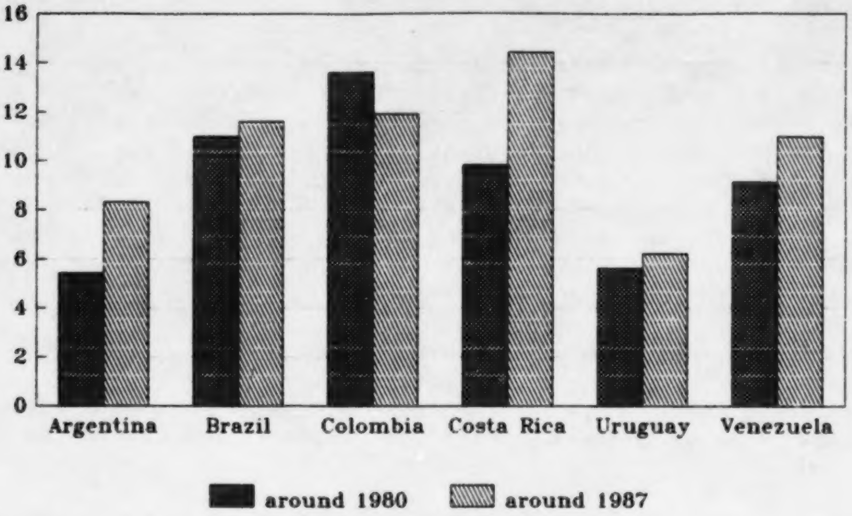
The Cuban economy has been subject to severe stress, as a result of the changes in the former USSR and the Eastern European economies. The drastic reduction in capital inflows has reduced the total resources available to the economy and the availability of essential intermediate and capital goods. Lower sugar prices have reduced the income of workers. Electricity generation has been restricted for lack of fuel. Transport and other services have been severely disrupted. While the harmful effects of these changes on the total economy can be surmised, their distributional consequences are difficult to assess without further information.

The decline in real wages and growing income disparity pushed an increasing number of people below the poverty line (see fig. VII.5). In all metropolitan areas in the region for which there is information, except in Colombia, the number of households with per capita income around the poverty line increased. 50/

In Africa, poverty is the result of rapid population growth, increasing pressure on limited fertile land and a reduced supply of social services. It is also the product of inadequate growth of agricultural yields and output which failed to keep pace with population growth, 51/ of a continued deterioration in the base region's terms of trade and of failed policies to promote capital-intensive industrialization at the expense of agriculture. The continent has also been subject to drought, locust infestation and other pests and civil strife (see chap. 12), all of which imposed a heavy toll on output growth and development and left some 30 million people in 1991 facing starvation (see chap. II). The economic difficulties of the 1980s compounded the problems of urban unemployment and deteriorating social services. As rural incomes stagnated and urban earnings declined, the number of people living in poverty increased.

Some African economies grew relatively fast during the past two decades and reduced poverty. In Morocco, the economy grew 5 per cent during the 1970s and the 1980s, and the incidence of poverty fell from 43 per cent of the population in 1970 to 34 per cent in 1984 (see table VII.10). Growth in Tunisia also reduced poverty; success was faster in cities due to a rapid increase in urban wages from 1976 to 1983. Remittances from the cities and from abroad helped to raise average rural income. 52/ However, fast growth did not lead to less poverty in Botswana, whose economy grew at an annual rate of 11 per cent in 1965-1989. In 1985, almost 50 per cent of its population lived on incomes of less than $370 purchasing power parity (PPP), evidence that market forces alone do not reduce mass poverty in a reasonable period of time.

Figure VII.5. Percentage of households whose per capita income ranges from 0.9 to 1.25 of the poverty line in Latin American metropolitan areas



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Source: Department of Economic and Social Development, United Nations Secretariat, based on ECLAC, "Panorama social de America Latina" (LC/G.1688, October 1991).

Table VII.10. Changes in the incidence of poverty in selected developing countries of Africa and Asia

(Percentage of total population)

| Country | First year | Last year |
|---|---|---|
| Bangladesh (1981-1985) | 73 | 52 |
| China (1985-1988) | 10 | 14 (rural only) |
| India (1977-1985) | 50 | 33 |
| Indonesia (1984-1987) | 28 | 17 |
| Malaysia (1970-1987) | 49 | 17 |
| Pakistan (1978-1987) | 52 | 34 (rural only) |
| Philippines (1985-1988) | 59 | 49 |
| Republic of Korea (1976-1982) | 15 | 8 |
| Thailand (1980-1988) | 23 | 25 |
| Côte d'Ivoire (1985-1986) | 30 | 31 |
| Egypt (1978-1984) | 23 | 34 |
| Morocco (1970-1984) | 43 | 34 |
| Tunisia (1980-1985) | 32 | 23 |

Sources: World Bank, World Development Report, 1990 (Washington, D.C., 1990), table 3.2, p. 41; UNICEF, "Statistics on children in UNICEF-assisted countries" (April 1990); H. T. Oshima, "Employment generation: the long-term solution to poverty", Asian Development Review, vol. 8, No. 1 (1990); S. Radwan and others, Tunisia: Rural Labour and Structural Transformation (London, Routledge, 1991); World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4).

In South Asia and East Asia, previous gains in poverty alleviation were not lost during the 1980s. In seven out of the nine countries presented in table VII.10, the incidence of poverty fell. However, in Thailand and China, the incidence of poverty increased at least temporarily. In Thailand, the phenomenon is concentrated in the rural areas and is most likely the result of declining farm prices during the period 1981-1986. Poverty continued to decline in urban areas. 53/ The upsurge in economic activity in the late 1980s most likely reversed the short-lived trend in Thailand for poverty to increase. In China, there is some evidence that the incidence of poverty increased after 1985. As in Thailand, this is also believed to be mainly a rural phenomenon and possibly the result of stagnating agricultural production and increasing inflation. In urban areas, the incidence of poverty increased after 1987, particularly among groups receiving fixed incomes (pensioners), as accelerating inflation reduced their purchasing power. 54/

In many countries in Asia, success in poverty alleviation has come from the generation of employment opportunities in fast-growing economies supported by measures that allow the poor access to productive and remunerative activities either by redistributing assets (such as agrarian reform) or by upgrading skills through education and other social services. Reduced fertility played an important role by releasing pressure on land resources and cutting down dependency ratios. At a later stage, export-oriented industries absorbed labour and raised wages. 55/

In Malaysia and Indonesia, the incidence of poverty was reduced by rural development programmes. In Malaysia, investment in irrigation and drainage, sustained extension programmes, new varieties of seeds and subsidized modern inputs helped raise agricultural output. Processing and marketing facilities raised value-added and producers' prices. Similar programmes in Indonesia helped expand employment in rural areas. Rural incomes also rose from off-farm activities in services and construction. 56/ The contribution of manufacturing to poverty alleviation was limited, especially in Indonesia. 57/

India, Pakistan, Sri Lanka and Bangladesh adopted a more direct approach, implementing direct employment programmes (food-for-work) to provide supplementary income during the dry months when there is little work in agriculture. The local community benefited from the resulting assets, such as roads and irrigation works. Subsidized credit to start a business, usually on a very small scale, has been another approach. 58/ Some of these programmes have been criticized on the grounds that the assets created are of inferior quality, that the programmes are not reaching target populations or that they do not generate adequate additional income for the poor. However, there are evidently successful programmes. The Jawahar Employment Programme provides jobs for about 10 per cent of the rural poor in India. 59/

## Women in poverty

The weight of poverty falls heavily on women. Females in a poor household are often worse off than males because of gender-based differences in the distribution of food and other entitlements within the family. 60/ In poor households they often shoulder more of the workload than men, are less educated and have no access to remunerative activities. On average, women in developed countries live six years longer than men, whereas in developing countries, the excess is two years. In some developing countries, including Bangladesh, Bhutan and Nepal, life expectancy at birth is higher for males than for females.

Low literacy levels of women go hand in hand with poverty, particularly in rural areas where low enrolment and high dropout rates result from the belief that it is more important to educate boys. Of the 960 million illiterate adults in the world in 1990, 640 million, or two thirds, were women. In 1990, in developing countries, the female illiteracy rate was 45 per cent, compared with 25 per cent for males. Female illiteracy rates in sub-Saharan Africa, North Africa, West Asia and South Asia were above 60 per cent, while the rate for males varied between 35 per cent and 41 per cent. If current trends continue, one female adult out of two will still be illiterate in these three regions in the year 2000.

About one third of all households in developing countries are headed by women. In some regions, as in rural Africa and the urban slums of Latin America, the number is closer to half. A large proportion are landless, unskilled, illiterate, unemployed or underemployed. In most industrialized nations, households headed by women are also poorer than those headed by men. In the United States, almost half of all poor families are supported by a woman with no spouse present, and their average income is 77 per cent of the official poverty line. 61/ Furthermore, nearly one in every four children under the age of six is currently brought up in poverty. 62/

Workloads and household responsibilities place a heavy physical and mental strain on poor women. The multiple roles of rural women, who have both domestic and agricultural responsibilities, impose a long working day. Most studies put the daily workload of rural women in developing nations at 15-16 hours. At seasonal peak periods, such as harvesting, it may be longer. Rudimentary utensils and procedures for food preparation and the lack of nearby sources of fuel and clean water make their household tasks even more time-consuming. Participation of women in economic development programmes is usually hampered by a lack of time and energy.

Women play a central role in producing food, generating income, bearing and raising children and in overall household production. They are a key force in reducing hunger and poverty, promoting family welfare and contributing to overall economic development. As labourers for hire and on the family farm, women play a major role in food production. They produce more than half the food in developing countries and as much as three fourths in Africa; they probably account for more than 90 per cent of all time spent processing and preparing it. 63/ They play a substantial part in storing, processing and marketing food and cash crops, and they often take care of small livestock. In India, for example, women provide 75 per cent of the labour for transplanting and weeding rice, 60 per cent for harvesting and 33 per cent for threshing. 64/ In Bangladesh, apart from harvesting activities, they are responsible for the post-harvest work, including the processing of rice. In addition, women are the primary collectors of fuel and water, which poor people generally must provide for themselves in the absence of public services. Moreover, women bear the major responsibility for ensuring the nutrition, health and cognitive development of children during pre-school years.

The adverse effects of the economic recession and remedial structural adjustment programmes should be added to the list of factors that have contributed to the impoverishment of women. As producers, women have been adversely affected by recession and demand restraint. There is some evidence that reduced employment and real wages in the formal sector affected women worse than men and that real earnings in the informal sector fell. 65/ Reduced family incomes in many economies, often below subsistence levels, imposed increasing demands on women's time to shop more often, trying to stretch income to meet the subsistence needs of the family. The income women themselves control has fallen in countries undergoing adjustment. Women's health, nutrition and education has fallen along with that of the rest of society, especially in the worst affected countries.

## E. Former USSR 66/ and Eastern Europe 67/

### 1. Equality under socialist regimes

Income distribution under socialism differed significantly from that in market economies. A minimum income was guaranteed to everyone by maintaining full employment. 68/ Wages and salaries were controlled by the State, the dominant employer in the economy. The tax system played a marginal role, except where there was a private sector. Money incomes were established at relatively low levels, sufficient, however, to support modest living standards. They were generously supplemented by numerous welfare benefits, consisting of transfers in cash, transfers in-kind, and subsidized housing and consumer goods. Transfer payments were unrelated to income levels and were equally distributed among households, except for family allowances. 69/

Although the ratio of expenditure on social benefits to national income was not, in general, larger than in market economies, the structure and character of social expenditure was very different. Transfer payments played a more important role in supporting the average income. The share of cash transfers in the gross income of households was 21-25 per cent at the end of the 1980s, except in Yugoslavia and the Soviet Union, where it was less than 15 per cent. The share of pensions in household gross income varied from 8 per cent in the Soviet Union to 12 per cent in Yugoslavia and 16.5 per cent in Bulgaria and Hungary. 70/ The share of family allowances was 5-6 per cent.

Transfers-in-kind and subsidies satisfied many social needs. They were delivered directly from the central budget or through enterprises. A full account of the effects on household income distribution cannot be made; there are no precise data on social services dispensed through the work place. Transfers-in-kind, as shown in table VII.11, ranged from education, health and canteen meals to subsidized theatre tickets and access to sports events and holiday homes, amounting to almost one third of the personal incomes in Hungary in 1989. Centrally funded social benefits in other countries were of similar magnitude. In Poland, they represented 27 per cent of total net disposable income at the end of the 1980s. 71/

## Table VII.11. Social expenditure in personal income, Hungary, 1989

(Current forint)

| Type | Total (billions) | Per household | Per capita (average) | Personal income (percentage) |
|---|---|---|---|---|
| Total services | 172.0 | 44 708 | 16 678 | 18.1 |
| Education | 74.0 | 19 323 | 7 175 | 7.8 |
| Kindergartens | 10.7 | 2 776 | 1 036 | 1.1 |
| Primary schools | 33.5 | 8 696 | 3 244 | 3.5 |
| Secondary schools | 17.7 | 4 598 | 1 715 | 1.9 |
| Higher education | 9.3 | 2 427 | 905 | 1.0 |
| Courses etc. | 2.8 | 736 | 274 | 0.3 |
| Health | 52.3 | 13 598 | 5 073 | 5.5 |
| Hospitals/clinics | 33.0 | 8 565 | 3 195 | 3.5 |
| Ambulatory care | 19.4 | 5 033 | 1 878 | 2.0 |
| Others | 45.7 | 11 878 | 4 431 | 4.8 |
| Creches | 3.7 | 952 | 355 | 0.4 |
| Holidays | 4.9 | 1 266 | 472 | 0.5 |
| Culture/sport | 23.9 | 6 206 | 2 315 | 2.5 |
| Canteen meals | 5.2 | 1 352 | 504 | 0.6 |
| Other | 8.1 | 2 102 | 784 | 0.9 |
| Total subsidies | 138.6 | 36 004 | 13 431 | 14.6 |
| Consumer subsidies a/ | 58.6 | 15 231 | 3 963 | 6.2 |
| Rent for housing | 8.6 | 2 235 | 834 | 0.9 |
| Heating | 20.6 | 5 353 | 1 997 | 2.2 |
| Water utilities (public & private) | 8.0 | 2 066 | 770 | 0.8 |
| Milk and milk products | 4.3 | 1 123 | 418 | 0.5 |
| Transport | 14.1 | 3 667 | 1 368 | 1.5 |
| School books | 0.4 | 96 | 36 | 0.0 |
| Theatre tickets | 2.7 | 691 | 258 | 0.3 |
| Medicines | 15.3 | 3 963 | 1 478 | 1.6 |
| Housing investments | 64.7 | 16 811 | 6 271 | 6.8 |
| Mortgages | 52.5 | 13 642 | 5 089 | 5.5 |
| Family bonus | 12.2 | 3 168 | 1 182 | 1.3 |
| Total: services & subsidies | 310.6 | 80 713 | 30 109 | 32.7 |

Source: Kozponti Statisztikai Hivatal, *Természetbeni és pénzbeni társadalmi jövedelnek* (Budapest, 1990).

a/ Excluding price and producer subsidies, except for milk and milk products.

The impact of consumer subsidies and benefits acquired through the work place on living standards was substantial. State enterprises contributed to various social funds to defray the costs of those services. 72/ The division of responsibilities between the government budget and enterprises varied among countries. In Poland and Bulgaria, sickness benefits were entirely borne by enterprises. In general, the provision of many important benefits, including housing, cafeterias, child care facilities, health clinics and vacation resorts, were tied to the work place. In 1986 in Poland, social benefits provided by enterprises constituted 5.4 per cent of the total income of the population. 73/ Explicit consumer subsidies also played an important role. In the late 1980s in Czechoslovakia, Hungary and Poland, they amounted to 13-14 per cent of household gross income.

During the first two decades after the Second World War, inequality as measured by access to opportunities and the distribution of money income decreased substantially. The virtual abolition of income from the ownership of wealth 74/ eliminated the most powerful source of income inequality. Equal access to opportunities was sought through job security and State-provided education. Wages allowed only a narrow differential to account for differences in skill, priority of the branch of industry and its location. The skill component was of special importance in establishing wage differentials. 75/ Wage reforms in the Soviet Union in 1959, for example, established an effective minimum wage - at first 27-30 roubles a month, later 40 roubles - and a ceiling pay of around 230 roubles a month. 76/ As a result, the ratio of non-manual employees' income to that of manual employees was significantly reduced in all countries in the region, especially as compared to the conditions before the War. In Poland, the ratio decreased from 2.63 in 1937 to nearly parity, 1.18, in 1960. 77/

Privileges for the Party nomenclatura and the emergence of a second and parallel economy made wide inroads into this egalitarian distribution of income. In the 1970s and 1980s, the second economy grew to meet unsatisfied demands and to circumvent increasing inefficiency in the State sector. 78/ In the Soviet Union and all countries of Eastern Europe, the second economy included a large variety of activities, ranging from fictional cooperative activities between individuals and State enterprises, private production of consumer goods and services and arbitrage to bribes and illegal trading of foreign currency. 79/

The shadow economy, which was a "free", or "black", market, constituted a powerful channel of income distribution outside the plan. It was a source of additional income - most often from a second or third job possible due to the undemanding pace of work in the State sector 80/ and tips - and a source of supply outside the plan of many scarce goods, including apartments, cars and services, such as repairs and maintenance, and medical care. Prices were usually much higher than for similar items within the State sector.

Privileges enjoyed by the Party nomenclatura included apartments, cars, dachas and privileged access to clinics, vacation resorts, special shops and hard currency at official rates. 81/ Privileges of this nature constituted a bonus to selected Party members for political loyalty, unrelated to work performance, and depended on their place in the Party hierarchy. These were extra incomes available within the State sector, divided in a discretionary way. 82/

Bonuses, paid in kind and in cash - in particular, coupons for cars, washing machines or television sets for fulfilment of norms in piecework, premiums for innovations 83/ and the payment of a thirteenth month's wage - proliferated in the 1970s and 1980s as work incentives. 84/ However, these bonuses could not work as planned in the absence of work-related evaluation criteria. At the enterprise level, it was impossible to distinguish profit-making enterprises. Thus, bonuses to higher management and, to some extent, to workers could not reward productive work. The distribution of bonuses was in effect unrelated to work performance and was guided, depending on circumstances, by the principle of equality or by the wish to reward political loyalty. In either case, the bonus system lost its value as an incentive and added to the perception of an "unfair" system.

In this "unfair" system, consumer goods and housing were cheap 85/ but most often inaccessible on a regular basis. Job security was maintained, but wages were low, failing especially in the 1980s to support even moderate living standards. There was practically no unemployment, yet demoralizing "unemployment on the job" enabled workers to undertake second or third jobs performed during regular working hours at State enterprises. In some professions, as in the State retail distribution system or health care, tips were prevalent and they became *quasi* official compensation to supplement low official wages and salaries. Social benefits of better quality were accessible only through privileges or bribes. Equality of money incomes became limited to official incomes in the State sector. Equality of opportunity and upward mobility was restricted to the Party nomenclatura. Executive positions and professional career opportunities, including access to lucrative privileges, became practically inaccessible to outsiders, regardless of their qualifications. At the same time, rapidly increasing distortions and the inefficiency of the centrally planned system resulted in declining growth rates, structural imbalances and distributional problems. The gap between the economic capabilities of the system and the expectations of better living conditions was stretched during the past two decades.

### 2. Distribution of income among households

In comparison with other countries, income distribution in Eastern Europe and the Soviet Union was highly egalitarian. 86/ At the end of the 1980s, Gini coefficients of the distribution of household income were systematically lower than in other economies. 87/ They ranged, except in Yugoslavia, from 0.2 to 0.3, compared to 0.3 to 0.4 and above, in other regions.

The lowest income inequality in the region was in Czechoslovakia and the highest in Yugoslavia. The differences among countries could be explained by the size of the private sector, in particular in agriculture, and by regional differences in income. The development of the private sector in urban areas and mixed ownership in agriculture contributed to the higher Gini coefficient in Hungary. The large share of private agriculture in the Polish economy and significant income differences among republics in the Soviet Union and Yugoslavia contributed to higher income inequality in those countries.

In general, the differences between the wages of more and less educated and skilled workers was lower in these economies than elsewhere. High technical qualifications and the social status of some professions - doctors, lawyers or teachers - were combined with low wages. A part of the explanation for low differentials is ideological. 88/ It is also probable that the relatively high wages of blue-collar workers were due to the disproportionally high demand for their labour sustained by archaic economic structures. 89/ Until 1990, the average wage of manual workers was almost equal to or even slightly above the average salary in industry (see table VII.12). The premium paid to engineers and technicians was decreasing, except in Czechoslovakia where the ratio was stable. The position of other white collar workers deteriorated in all countries except Bulgaria. Data for 1990 indicate that the relative wages of blue-collar workers were beginning to decline in all countries and that those of white-collar workers were on the rise. The trend is especially marked in Hungary. In some countries - Bulgaria, Poland and Czechoslovakia - farmers were better off than workers (see fig. VII.6). 90/

Supplements to these official incomes increased inequality substantially. 91/ The second economy was a main source of such increased inequality. In Hungary, the only country in the region to publish incomes from the second economy, in the late 1980s income from the second economy was about 30 per cent of total wages and was very unequally distributed. While the Gini coefficient of the distribution of earnings from the main employment in 1989 was 0.24, that for earnings in the second economy were as follows: secondary jobs, 0.48; tips, 0.36; income from tourism, 0.55. 92/ Although there are no comparable data in other countries, there is evidence to suggest that the role of the second economy was significant, especially in the 1980s. The share of incomes from the second economy in personal incomes in Poland seems to have tripled since the 1970s, when it did not exceed 5 per cent. 93/ In the Soviet economy 94/ in the mid-1980s, the second economy employed 17 million-20 million persons, although not full time. Urban dwellers relied heavily on the second economy, in particular for repairs to apartments, home appliances, clothing and cars. Legal and semi legal private activity also flourished, in agriculture contributing an estimated 26 per cent of gross output in Soviet agriculture and providing employment to 32 million families with private plots. Anecdotal evidence suggests that the second economy played an important role in other countries as well. 95/

Table VII.12. Wages and salaries of blue-collar workers, engineers and technicians, and other white-collar workers relative to average industrial wages and salaries a/

| | 1960 | 1970 | 1980 | 1984 | 1990 |
|---|---|---|---|---|---|
| Bulgaria b/ | | | | | |
| Blue collar | 0.99 | 0.98 | 1.01 | 1.01 | .. |
| Engineers, technicians | 1.41 | 1.37 | 1.23 | 1.24 | .. |
| Other white collar | 0.93 | 1.00 | 0.96 | 0.99 | .. |
| Czechoslovakia | | | | | |
| Blue collar | 0.98 | 0.97 | 0.97 | 0.98 | 0.97 |
| Engineers, technicians c/ | 1.14 | 1.17 | 1.14 | 1.15 | 1.13 |
| German Democratic Republic | | | | | |
| Blue collar | 0.99 | 0.97 | 0.98 | 0.98 | |
| Hungary | | | | | |
| Blue collar | 0.97 | 0.95 | 0.94 | 0.94 | 0.88 d/ |
| Engineers, technicians | 1.52 | 1.47 | 1.20 | - | 1.38 d/, e/ |
| Poland | | | | | |
| Blue collar | 0.96 | 0.96 | 1.00 | 1.01 | 0.96 |
| Engineers, technicians | 1.54 | 1.43 | 1.23 | 1.18 | 1.15 |
| Other white collar | 1.00 | 0.98 | 0.84 | 0.84 | |
| USSR | | | | | |
| Blue collar | 0.98 | 0.98 | 1.00 | 1.00 | 0.96 |
| Engineers, technicians | 1.48 | 1.34 | 1.15 | 1.11 | 1.16 |
| Other white collar | 0.81 | 0.84 | 0.79 | 0.78 | |

Source: Department of Economic and Social Development, United Nations Secretariat, based on national statistics.

a/ Average wage and salary in the so-called socialized industry (State and cooperative enterprises).

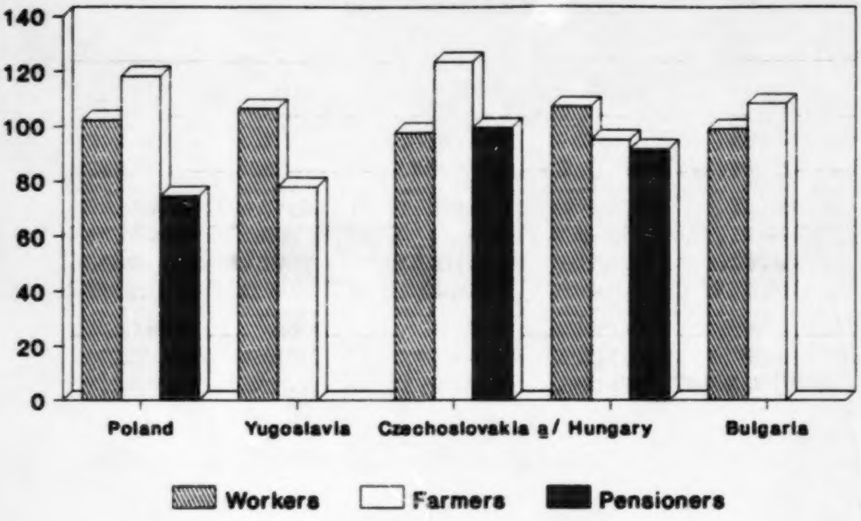
b/ State enterprises only.

c/ Engineers and planners.

d/ 1989.

e/ Persons in the learned professions. The ratio for 1990 is not fully comparable with that of previous years due to the inclusion of income tax since 1 January 1988.

Figure VII.6. Relative per capita income in 1989 in selected Eastern European countries



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Source: Branko Milanovic, "Poverty in Eastern Europe in the years of the crisis, 1978-1987: Poland, Hungary and Yugoslavia", World Bank Economic Review, vol. 5, No. 2 (1991), pp. 187-205.

Notes: Average = 100.

Estimates are based on national household surveys.

a/ 1988.

Most incomes within the second economy came from second jobs and tips. Typically, one retained a job in the State sector to secure basic wages and social benefits and worked elsewhere for higher incomes. 96/ Sometimes, as in Hungary until 1988, the second job was conducted on the same premises as the first, under "business partnerships" with public enterprise. In other instances, it was done illegally. Plumbers and other craftsmen employed in State enterprises offered their services during working hours using factory equipment and stolen spare parts. Doctors performed surgery on private patients in State hospitals, and teachers gave private lessons to their pupils in State schools or universities.

Tips, gifts and bribes were widely used to increase official wages and salaries. It is estimated that those types of income constituted roughly one third of earnings within the Soviet shadow economy in 1990. 97/ Given the magnitude of tipping in the State sector, a part of it must have been done with the quiet consent of authorities. Payments of this nature in the Hungarian health sector in the 1980s were estimated at approximately 4 billion forint, about 40 per cent of official earnings of health workers, which amounted to 10 billion forint. 98/ "Under-the-counter" payments to the health providers in Czechoslovakia were estimated to have increased the share of national income spent on health from 5.1 per cent to 6 per cent in 1988/89. 99/

The non-targeted welfare system proved to be particularly vulnerable to abuse. The right to buy low-priced meat in a State shop, live in a subsidized apartment, buy a car or a washing machine, be hospitalized when sick, and place children in a nearby kindergarten were, in principle, available to everyone equally. But a large number of these benefits, in particular those of higher quality, were distributed outside the formal channels as political privileges, political and personal rewards, gifts and bribes. In many instances, tips were necessary to obtain benefits such as repairs of apartments by the local administration or timely treatment at the State dental clinic. Consequently, the total income of households depended on their jobs in the State sector, access to second economy jobs and incomes, transfer payments in cash and social benefits in kind and the quality of those services.

Clearly, there were households whose income was substantially higher than that of others. Among them were the top layers of the Communist Party - selected Party members, government officials, military and diplomatic personnel and managers of big enterprises. 100/ Privileges were very unequally distributed among them, depending upon whether they worked at the central, regional, local or enterprise level, and the "priority" of their activities at a given moment. In general, all those directly involved in decision-making and the distribution of capital goods, financial resources and public consumer goods were privileged. Some collected bribes or sold goods and services stolen from the State. Others were rewarded for genuine entrepreneurial talent or professional knowledge. Small-scale businessmen or farmers, producing fruits, vegetables and flowers around big cities, representatives of the intelligentsia, such as doctors or lawyers with easy access to second jobs within the State sector, earned high incomes. The overvalued exchange rates of hard currencies and black market operations offered huge gains to those who had foreign currency.

Differing consumption patterns provide further evidence of disparities in income. In Bulgaria, in 1985, 26.1 per cent of the households of blue-collar workers had a color television set, as compared to 45.5 per cent among white-collar workers and 8.2 per cent among agricultural workers. Cars were owned by 37.9 per cent of blue-collar households, by 56.0 per cent of the white-collar and 19.1 per cent of the agricultural. 101/ The share of food in total consumption of various social groups differed significantly. In 1989, in Poland, the share of food in total consumption expenditure varied from 44 per cent in households of white-collar workers to 62 per cent in those of pensioners. 102/ The average usable floor area per person in the urban households of blue-collar workers with an education above primary level in Poland in the early 1980s was 13.1 square metres, with 57 per cent of the flats fully equipped with water, water closet, central heating and other amenities. In households headed by white-collar workers, with a higher level of education, the comparable floor area was 17.4 square metres, and 86 per cent of the flats were fully equipped. 103/

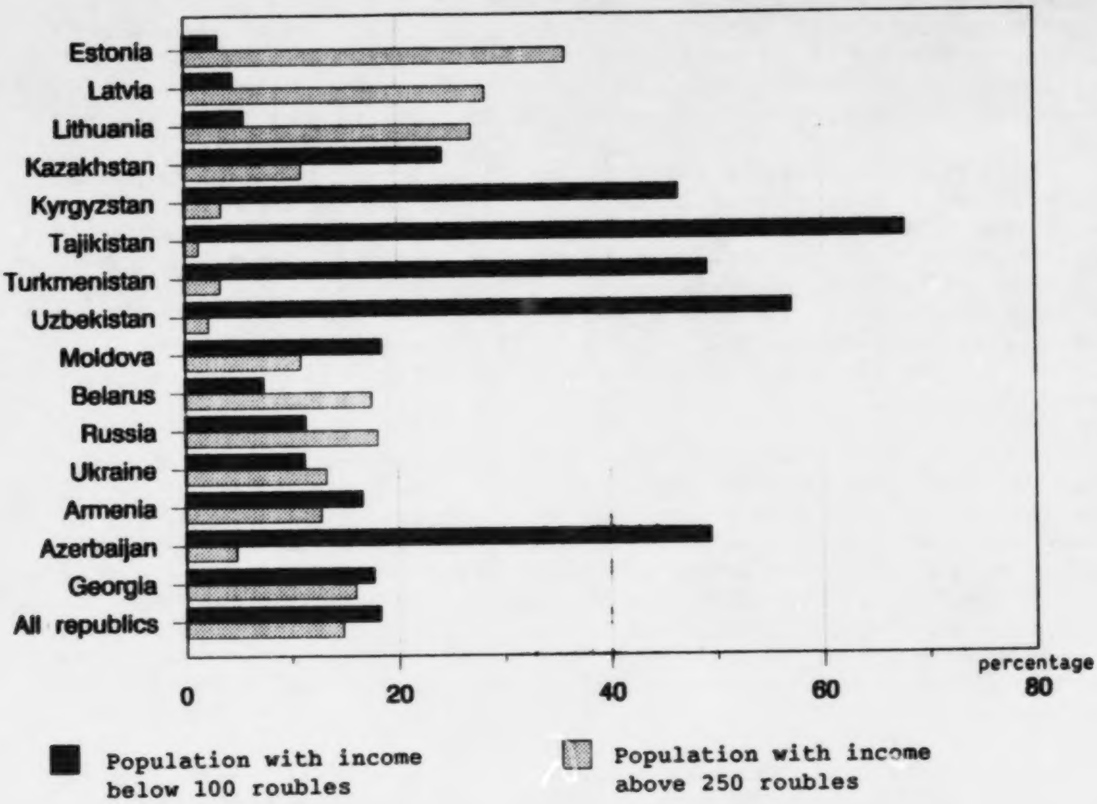
There were also considerable differences in the health status of various social groups. In Bulgaria, 36.7 per cent of agricultural workers, 19 per cent of manual workers and 14.6 per cent of non-manual workers were classified as health-impaired. Among those who earned 120 leva or less per month, 35 per cent were reported to be in impaired health, as compared to 20.4 per cent among those who earned above 300 leva. 104/ In Poland in 1987, mothers employed in manual work experienced on average 6.3 stillbirths per 1,000 live births; the rate for non-manual workers was 5.2 per cent; among the self-employed, the corresponding rate was 3.4 per cent. Perhaps self-employed mothers were able to obtain better health care, in particular from the second economy, since the incidence of stillbirth is highly sensitive to the availability of skilled obstetric and nursing care. 105/

Differences in net material product per capita among the constituent republics of the USSR were large. According to Goscomstat data, in 1990 net material product per capita, as a percentage of the average in the USSR, ranged from 137 per cent in Estonia to 39 per cent in Tajikistan. Infant mortality rates varied from 10 per 1,000 live births in Lithuania to 45 in Turkmenistan. The incidence of infectious disease, such as viral hepatitis, differed from 86 registered instances per 100,000 population in Estonia to over 1,074 in Uzbekistan. In general, the Baltic republics - Estonia, Latvia and Lithuania - enjoyed relatively high incomes and living standards while the Central Asian republics were characterized by low social and economic indicators.

Figure VII.7 presents the distribution of population by income groups in each of the constituent republics of the USSR in 1990. The poverty line in 1990 was a minimum income of 95 roubles. In Tajikistan, almost 70 per cent of the population earned an income below 100 roubles, and 1.5 per cent earned above 250 roubles. In contrast, in Estonia, 36 per cent of the population earned an income above 250 roubles, and only 3.5 per cent earned less than 100 roubles.

The social infrastructure in poor and rich republics differed considerably. The number of places in kindergartens in proportion to the number of children of corresponding age at the end of the 1980s was, for example, 16 per cent in Tajikistan and around 30 per cent in Kyrgyzstan and Turkmenistan, while the average in the USSR was almost 60 per cent.

Figure VII.7. Income distribution in the Soviet republics, 1990



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Source: Department of Economic and Social Development, United Nations Secretariat, based on Narodnoje Khozyaistvo SSSR v 1990 godu (Moscow, Finansy i Statistika, 1991), p. 115.

### 3. Poverty under socialism

Poverty, which had been practically eliminated in the centrally planned economies during the rapid pace of post-War industrialization, re-emerged in the late 1970s. It is estimated that half of the poor in developed countries - about 100 million - live in Eastern Europe and the former Soviet Union. 106/ However, there are ambiguities in defining poverty levels. 107/

These problems notwithstanding, there is agreement that the number of people living in poverty rose in all countries in the region during the past two decades. The studies of the World Bank, 108/ the Luxembourg Income Studies 109/ and certain others are consistent in their conclusions. Between 1978 and 1987, poverty increased most in Poland and Yugoslavia, less or not at all in Hungary and Czechoslovakia (see fig. VII.8). The proportion of people living below the poverty line ranged from 22.7 per cent in Poland and 24.8 per cent in Yugoslavia to 17 per cent in Hungary and 7.4 per cent in Czechoslovakia.

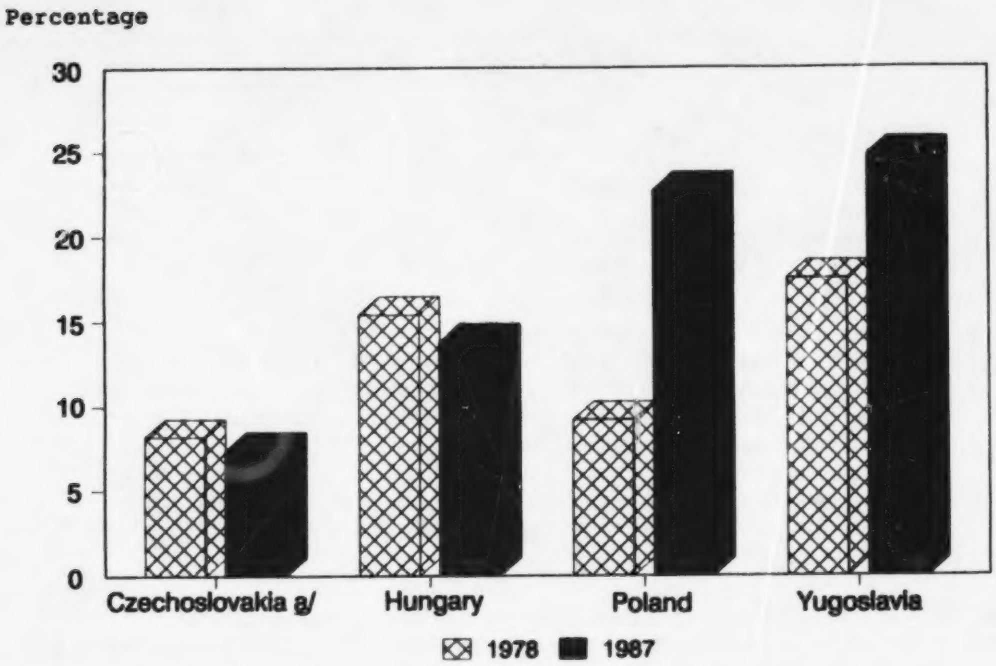
Poverty is also a major problem in the constituent republics of the former Soviet Union, although estimates vary. Some estimates claim that there were about 41 million people below the subsistence minimum in 1990. 110/ Others show that every third person in the former Soviet republics had a monthly income below 100 roubles per family member and that every seventh had below 75 roubles in 1989. 111/ The incidence of poverty was very uneven among the constituent republics. In Tajikistan, 60 per cent of the population had an income below the all-union subsistence level; in Uzbekistan, half the population, and in Azerbaijan, Kirghizia and Turkmenia, one third fell into that category.

During the 1980s, the social composition of groups in poverty changed substantially (see table VII.13). Impoverishment among workers increased most. The living standards of residents in urban centres deteriorated more than those of farmers. Late in the 1980s, homeless people and beggars - extinct social groups under socialism - slowly became a part of the city landscape in many countries in Eastern Europe and in the former Soviet Union. The risk of falling into poverty was highest in the former Soviet Union for large families and therefore children, non-male headed families and one-earner families. 112/

During the past two decades, all societies in the region have become less egalitarian. Frustration due to lack of career opportunities and upward mobility and complaints about unfairness and inequality became more common. While some could barely make a living, others enjoyed high living standards and numerous benefits, including better-quality health care, education and privileged access to consumption goods. Demands for social justice were widely voiced, perhaps most eloquently by the Polish "Solidarity" movement in the Gdansk Accord of 31 August 1980 and later documents. 113/

The foregoing brief account of the experience in the formerly centrally planned economies in Europe, as well as the recent experiences in China and Viet Nam, raise questions about trade-offs between efficiency and equality in the economy. Communism as a way of organizing the economy, and society drew its strength not merely from a desire for solidarity and equality but also from a need to resolve perceived contradictions in economic relations between

Figure VII.8. Population below the poverty line in selected countries, 1978 and 1987



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Source: Department of Economic and Social Development, United Nations Secretariat, based on estimates for Hungary, Poland and Yugoslavia by Branko Milanovic, "Poverty in Eastern Europe in the years of the crisis, 1978 to 1987: Poland, Hungary and Yugoslavia", World Bank Economic Review, vol. 5, No. 2 (1991), pp. 187-205; and calculations of M. Hirsl, reported by Yiri Vecernik, "Poverty in Czechoslovakia - one brief report from two surveys", paper prepared for the Czechoslovakia Academy of Sciences, 1991.

a/ 1980 and 1988.

Table VII.13. Proportion of people in poverty in three Eastern European countries, by social group

| | Farmer | | Worker | | Mixed | | Pensioner | |
|---|---|---|---|---|---|---|---|---|
| | 1978 | 1987 | 1978 | 1987 | 1978 | 1987 | 1978 | 1987 |
| Hungary | .. | 11 | .. | 17 | .. | .. | 21 | 11 |
| Poland | 15 | 21 | 6 | 25 | 10 | 13 | 21 | 28 |
| Yugoslavia | 42 | 45 | 9 | 20 | 17 | 27 | .. | .. |

Source: Department of Economic and Social Development, United Nations Secretariat, based on government data quoted in Branko Milanovic, "Poverty in Eastern Europe in the years of the crisis, 1978-1987: Poland, Hungary and Yugoslavia", World Bank Economic Review, vol. 5, No. 2 (1991), p. 196.

Note: In Hungary "farmer" includes mixed households. In Yugoslavia, "worker" includes pensioners.

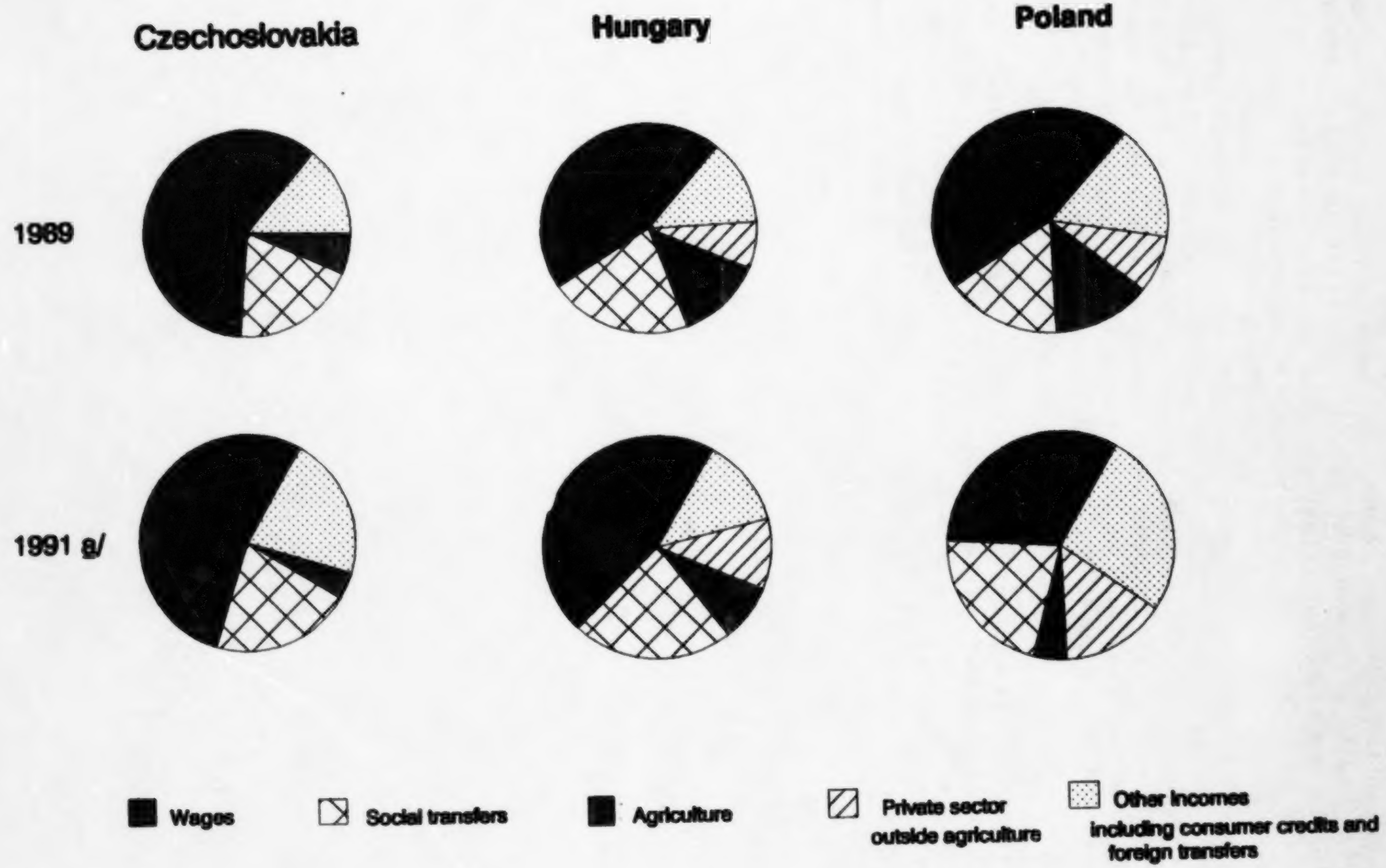
workers and capitalists which stood in the way of raising production productivity. It was believed that the objectives of solidarity, equality and the rapid betterment of economic and social conditions were compatible with one another and achievable in reality. 114/

It is now postulated that the principles of organization in the command economy suffered from insurmountable problems of obstructing information flows, inflexibility in resource allocation and lack of incentives to minimize costs, undertake risks and innovate. 115/ However, it is worth recalling that standards of living in the centrally planned economies grew substantially until about 1970. The system eliminated large differences in money incomes and offered wide opportunities for social mobility. Although living standards were substantially lower than in other developed countries, there was not a vast chasm between the perceptions of the public at large and the lofty ideals which the new societies set for themselves. That harmony was built partly on expectations that improvements in conditions of living would be continued in the future. Those expectations proved to be false. The rate of growth of output slowed markedly, and there appeared various forms of privilege and a second economy which made for rising inequality. In any event, there was no improvement in conditions of living or equality in its distribution.

The political, economic and social transformations of these societies seem to offer a way out of the impasse. The social costs of the transition have been enormous. Unemployment, dismantling the welfare system and sharp increases in the cost of living have bred disappointment, insecurity and fear of the future. 116/ The costs of transition have differed, depending on the model, the initial conditions and the pace of transition. Polish society had to pay a higher price for "shock therapy" than Czechoslovakia or Hungary, where changes were more gradual. Major social groups which initiated the changes - wage earners and farmers - became worse-off in the process. The share of wages in total incomes in Czechoslovakia, Hungary and Poland was lower in 1991 than in 1989 (see fig. VII.9). The share of social transfers increased in all countries to protect the more vulnerable social groups. Income from the private sector, grew except in Czechoslovakia. Wage earners in Poland were particularly hard hit in the changeover to the market. The dramatic increase in the cost of living in 1988 and 1990 slashed average real wages and salaries (see fig. VII.10). The gap between wages and salaries grew. The elimination or substantial decrease of subsidies for foodstuffs, housing, gas and electricity reduced real incomes drastically. The share of food and other necessities, such as rent, gas and electricity, in workers' household spending rose from 46 per cent in December 1989 to 78 per cent in June 1991. 117/

The new economic organization of these societies will make their income and wealth distribution more uneven than before. Whether such inequalities will be acquiesced depends very much on whether safety nets will be provided to those adversely affected by the changeover. That is no easy task in societies where all social services were in the past provided by government, which now lacks the capacity to provide. Since voluntary organizations take time to build themselves up, there is much to be said for minimizing the abruptness of change.

Figure VII.9.  Changes in the structure of income in selected Eastern European countries



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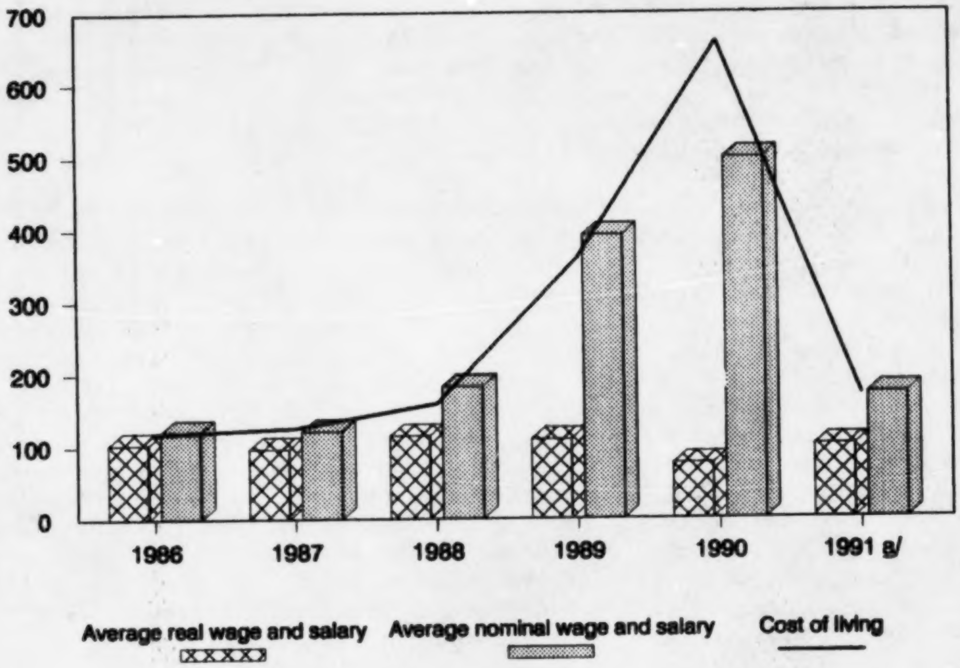
Source: Department of Economic and Social Development, United Nations Secretariat, based on national balances of money incomes of population.

a/ January-November.

Figure VII.10. Index of average monthly real and nominal wage and salary in the socialized sector and cost of living in Poland, 1986-1991



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Source: Department of Economic and Social Development, United Nations Secretariat, based on Rocznik Statystyczny (Warsaw, Government Statistical Office, 1991).

a/ Consumption prices.

## F. Policy considerations

Policies for the eradication of poverty and the reduction of inequality vary greatly. There are, however, certain common features and components of such policies. In the International Development Strategy for the Fourth United Nations Development Decade, the General Assembly recognized that "the absence of an adequate income through landlessness or the lack of opportunities for work is a prime cause of poverty". 118/ Since poverty is usually associated with landlessness and malnutrition, attacks on poverty call for, among other things, a more equitable distribution of land resources and a greater emphasis on agricultural development, particularly food production.

Some land reforms, such as those undertaken in China, including Taiwan Province, in the late 1940s and 1950s, have been remarkably successful in both reducing economic and social inequality and generating economic growth. Land was distributed to the landless, and there was a large-scale absorption of labour in agricultural production. Other attempts at land reform, including those in Mexico in 1920 and in Peru in 1960, had less effect on either poverty or inequality, mainly because there was no absorption of rural labour in agriculture after the reforms. 119/ Most land reforms have been timid and partial and have not been followed by complementary measures, such as the extension of infrastructure and financial resources, which allow new owners to exploit their new assets. 120/ In many cases, powerful groups in whose hands most of the land - often idle - was concentrated opposed re-distribution, and the reform, when implemented, covered only limited areas of land of poor quality. The impact on poverty alleviation was small. In other countries, arable land resources are so limited that the redistributed land does not allow meaningful improvement in the earnings of new holders.

Improvements which increase yields raise incomes among smallholders and create employment. 121/ They do not reduce inequality of income among landowners, although increased income from employment will contribute to that end and reduce poverty. However, these augmentations depend on additions to infrastructure, fixed investments, working capital and access to knowledge, which generally are more readily available to rich farmers than to poor ones. Consequently, inequality is likely to rise. Although the positive impact on income from labour may reduce poverty, agriculture cannot, alone, in most instances, absorb the excess labour in the economy. Employment opportunities have to be generated elsewhere, although not necessarily in cities.

Employment creation remains the most powerful instrument for reducing both inequality and poverty. For people to be employable, they must be healthy, educated and skilled. The spread of health infrastructure into rural areas and among the poor in urban areas is thus a necessary part of social policy. For functional literacy in the work force, primary and secondary education have to be made available to all. The role of education needs special emphasis. Publicly financed education provides an income-earning asset to the poorest which does not have to be snatched from some other owner. It is through education that the poor can upgrade their skills and participate in and influence the economic and political system. Education increases mobility and reduces inequality, if there is demand for the skilled labour released by the educational system.

A reduction in the rate of population growth is an integral part of these strategies. A slower rate of growth of the labour force makes it easier to provide full employment. It means less pressure on land resources and less demand for social services.

An improvement in the condition of women in economic and social life is a necessary condition for reducing inequality and poverty. Educating women and opening employment opportunities for them is an essential part of that process. They need access to medical services. In developed countries, child-care services are essential in order to enable women in poverty to take full-time jobs and climb out of poverty. Access to nutrition, health care, education and legal rights on an equal footing with men will enable women to assume the positions of responsibility from which they are so far conspicuously absent.

Poverty reduction is not necessarily a long-term process. The rapid reduction and elimination of the worst forms of poverty in several countries, including China, Cuba, Japan, the Republic of Korea, Mauritius, Singapore, Sri Lanka and Thailand, since the Second World War show what can be done in a relatively short time. On the other hand, the speed with which sub-Saharan Africa fell into extreme poverty, and the emergence of poverty in the economies in transition show how rapidly conditions can deteriorate. The emergence of a class of new poor in economies subject to rapid decompression in the course of rapid adjustment was very quick. Determined, well-designed and efficiently implemented policies are crucial to anti-poverty strategies. Governments have a powerful role to play here.

Social safety nets for individuals and families are needed in policies to eliminate poverty. In economies in transition, these have yet to be set up. In many developing countries, such short-term assistance cannot be provided without international assistance. In developed countries, many such safety nets have been subverted into long-term income-support measures, inducing the poor to remain poor. These are now being widely re-examined (see chap. II).

There can be no reduction of poverty in developing countries, especially in Africa, unless growth and development take root. Domestic policies will determine whether such development will contribute to the eradication of poverty. But international conditions also play a major role. Expanding trade, open markets and net flows of resources of capital, knowledge and skills are indispensable.

## Notes

1/ The average level of investment per worker - measured in thousands of 1980 dollars - doubled from $0.2 to $0.4 in South and East Asia from the period 1976-1980 to the period 1986-1990. It declined in Africa from $0.5 to $0.3 and in Latin America from $1.5 to $0.9 during the same periods. See World Economic Survey, 1992 (United Nations publication, Sales No. E.92.II.C.1), pp. 67-69.

2/ S. Dowerick, "Technological catch up and diverging incomes: patterns of economic growth 1960-88", Economic Journal, vol. 102 (May 1992), pp. 600-610.

## Notes (continued)

3/ On the economic developments of Eastern Europe and the former USSR, see World Economic Survey, 1992 (United Nations publication, Sales No. E.92.II.C.1), pp.23-30.

4/ For a parallel exercise using purchasing power parity rates of exchange, see Ronald V. A. Sprout and James H. Weaver, "International distribution of income", Kyklos, vol. 45 (1992), pp. 237-258. The results derived are not entirely different. It had been shown that the main inequality measures and the Lorenz curves of world distribution of income are not very sensitive to the different exchange rates. See A. Berry and others, "The world distribution of income: evolution over the recent period and effects of population growth", paper presented at the United Nations Expert Group Meeting on the Consequences of Rapid Population Growth in Developing Countries (IESA/P/AC.26, August 1988).

5/ This ignores the distribution of income within each country. Lack of data is the obvious reason. Further, it has been argued that differences in income among countries are far larger than differences in income among households within each country.

6/ Chinese per capita output grew at an average annual rate of about 9 per cent during the period 1981-1985 and about 6 per cent in the period 1985-1988, whichever the output concept used. India's performance was less formidable at around 3 per cent a year during the periods considered.

7/ See Trade and Development Report, 1991 (United Nations publication, Sales No. E.91.II.D.15), pp. 29 and 34.

8/ See World Bank, World Development Report, 1992 (Oxford and New York, Oxford University Press, 1992), pp. 232-233.

9/ Ibid., pp. 244-245.

10/ World Bank, Sub-Saharan Africa: From Crisis to Sustainable Growth (Washington, D.C., 1989), p. 117.

11/ The Gini coefficient household income distribution in the metropolitan area (greater Buenos Aires) increased from 0.36 in 1980 to 0.4 in 1986. See Economic Commission for Latin America and the Caribbean, "Nota sobre el desarrollo social en America Latina" (No. 511/512, July 1991).

12/ See World Economic Survey, 1990 (United Nations publication, Sales No. E.90.II.C.1), box II.1, pp. 30-31.

13/ Some studies suggest that the average income in the informal sector is actually higher than in the rural traditional activities. See, D. Trunham and others, (ed.), "The informal sector revisited" (Paris, OECD Development Centre, 1990) and J. E. Rauch, "Economic development, urban underemployment and income inequality", Working Paper No. 3758 (Washington, D.C., National Bureau of Economic Research, June 1991), p. 14.

## Notes (continued)

14/ D. Ghai, and C. H. de Alcantara, "The crisis of the 1980s in Africa, Latin America and the Caribbean: an overview", The IMF and the South: The Social Impact of Crisis and Adjustment, D. Ghai, ed. (Geneva, United Nations Research Institute for Social Development, 1991).

15/ International Labour Organisation, World Labour Report, 1989 (Geneva, 1990), vol 4.

16/ W. van Ginneken, "Labour adjustment in the public sector: policy issues for developing countries", International Labour Review, vol. 129, No. 4 (1990), pp. 441-457.

17/ ILO, World Labour Report, 1989 ..., vol. 4, pp. 31-32.

18/ D. Ghai and C. H. de Alcantara, loc. cit., p. 26.

19/ A. de Janvry and others, "Adjustment and equity in Ecuador", (Paris, OECD Development Centre, 1991).

20/ The simulation exercise from which these conclusions were derived did not capture the impact of income from overseas investment (capital flight).

21/ I. Aldeman and J. E. Taylor, "Is structural adjustment with a human face possible? The case of Mexico" in Journal of Development Studies, vol. 23, No. 3 (April 1990), pp. 387-407. A slightly more equitable income distribution in Mexico as a result of adjustment policies was confirmed by other studies. See N. Lusting, "Poverty and income distribution in Latin America in the 1980s: selected evidence and policy alternatives" (mimeo), June 1990.

22/ A. K. Ghose, "Economic growth and employment structure: a study of labour outmigration from agriculture in developing countries" (Geneva, ILO, World Employment Programme, 1990).

23/ ECLAC, "Panorama social de America Latina" (LC/G.1688, October 1991), table 4, p. 46.

24/ T. Fashoyin, "Economic recession and employment security in Nigeria", International Labour Review, vol. 129, No. 5 (1990), pp. 649-663.

25/ Based on data obtained from ILO Yearbook of Labour Statistics, 1989-90 (Geneva, 1990), table 10, pp. 646-649.

26/ Wage employment in the urban formal sector was estimated to have grown by 5 per cent during the period 1980-1985, while the urban labour force had increased by 29 per cent during the same period. Unemployment increased by 61 per cent. See ILO, World Labour Report, 1989 ...

27/ Van Ginneken, loc. cit., p. 447.

28/ Z. Daoud, "La frustration des classes moyennes au Maghreb", Le Monde Diplomatique, No. 452, 38ème année (Novembre 1991).

## Notes (continued)

29/ P. A. Dorosh and others, "Macroeconomic adjustment and the poor: the case of Madagascar", Cornell Food and Nutrition Policy Program, monograph 9 (December 1990).

30/ Wage inequality was measured by the coefficient of variation of the average wage paid in different branches of manufacturing as reported in the ILO Yearbook of Labour Statistics, 1990 for four African countries (Malawi, Kenya, Zimbabwe and Mauritius) in 1981 and 1988. The coefficient of variation (the ratio of the standard deviation to the mean) declined in all of them due to slower growth in nominal wages in industries paying the highest salaries in 1981.

31/ In Ghana, for instance, about 70 per cent of rural income originated in farming, with the rest coming from self-employment (16 per cent) and wage employment (11 per cent). See Ghana Statistical Service (Accra), and World Bank, "Ghana living standards survey: preliminary results 1988" (mimeo), October 1988, p. 86.

32/ C. Lancaster, "The political economy of economic reform: focus on sub-Saharan Africa", paper prepared for the United Nations Committee for Development Planning at its twenty-eighth session, (mimeo), November 1991.

33/ F. L. Pryor, "The political economy of poverty, equity, and growth: Malawi and Madagascar" (World Bank, Washington, D.C., 1990).

34/ S. R. Weissman, "Structural adjustment in Africa: insights from the experiences of Ghana and Senegal", World Development, vol. 18, No. 12 (1990), pp. 1621-1634.

35/ See World Bank, World Development Report, 1990 (Oxford and New York, Oxford University Press, 1990), pp. 106-107.

36/ K. Bhatia, "Commerce exterieur et distribution des revenus: le cas de la Malaisie", in Commerce exterieur et distribution des revenus (Paris, OCDE, 1989), F. Bourguignon and C. Morrisson, eds., pp. 89-124, and H. Bruton, "The political economy of poverty, equity and growth: Sri Lanka and Malaysia", (mimeo), May 1988.

37/ A. Young, "The political economy of poverty, equity and growth: Hong Kong" in "The political economy of poverty, equity and growth: five small open economies", an unpublished World Bank study, R. Findlay and S. Wellisz, eds. (November 1988).

38/ L. Lim and others, "The political economy of poverty, equity and growth: Singapore", in "The political economy ...".

39/ C. Rodrigo, "Employment, wages and income distribution in Sri Lanka: 1960-1985" (New Delhi, ILO/Asian Employment Programme, April 1988).

40/ World Bank, "Assistance strategies to reduce poverty" (Washington, D.C., 1991), p. 16.

# Notes (continued)

41/ S. Ahmed and R. K. Peters Jr., "Adjustment with poverty alleviation: Indonesia's experience", background paper for World Development Report, 1990 (mimeo, December 1989), and Hal Hill, "Regional development in a boom and bust economy: Indonesia since 1970, Economic Development and Cultural Change, vol. 40, No. 2 (January 1992), pp. 351-379.

42/ In stabilizing the economy, savings fell more than consumption. Private consumption increased from 55 per cent of GDP in 1982 to 64 per cent in 1988; gross domestic savings declined from 34 per cent to 26 per cent. In Latin America, in contrast, the savings ratio remained stable during the 1980s, while consumption declined.

43/ The commune system did not lead to an elimination of income differentials within the various provinces because those with more fertile lands and access to other assets generated higher per capita income. Urban/rural inequalities persisted due to the lifetime employment guarantees and other provisions in cities and the limits imposed on rural migration. See S. J. Burki, "Development strategies for poverty alleviation", Asian Development Review, vol. 8, No. 1 (1990), pp. 1-17.

44/ For a summary on the Chinese reforms see S. Mukhopadhyay, "Rural poverty and inequality in post-reform China" (New Delhi, ILO/Asian Employment Programme, March 1990).

45/ World Bank, World Development Report, 1990 (Oxford and New York, Oxford University Press, 1990), p. 27. Those whose income was less than $370 per year in 1985 purchasing power prices were considered to live in conditions of poverty. While there can be much argument about the grossness of these figures, refinements are likely to yield few new insights.

46/ M. S. Ahluwalia, "Policies for poverty alleviation", Asian Development Review, vol. 8, No. 1 (1990), pp. 111-132.

47/ The regional figure is markedly distinct from that presented in table VII.7 due to the different methodology applied. Country-specific poverty lines - and not universal cut-off point - were set up for the concerned economies in the region, and the population living below those lines was identified. The regional figure therefore reflects and aggregation of the results of individual countries.

48/ The United Nations Secretariat has extensively analysed the impact of the economic crisis and adjustment policies on poverty. See the report of the Secretary-General, "International cooperation for the eradication of poverty in developing countries" (A/44/467, 18 September 1989), pp. 6-14. See also a more recent report under the same title (A/46/454, of 2 October 1991), pp. 10-20, and the 1989 Report on the World Social Situation (Sales No. E.89.IV.1), particularly chap. IV. Inequality and Poverty, pp. 36-46, and the annex: The critical social situation in Africa, pp. 113-126.

49/ ECLAC, "Note on structural adjustment and poverty in Latin America" (mimeo), December 1991.

## Notes (continued)

50/ ECLAC, "Panorama social de America Latina" (LC/G.1688, 31 October 1991), pp. 23-24.

51/ Food production in the continent grew at an annual average of 1.6 per cent after 1965 and population grew at 3 per cent per annum.

52/ S. Radwan and others, "Tunisia: rural labour and structural transformation" (ILO/WEP(02)/R23, 1991), pp. 56-61.

53/ H. T. Oshima, "Employment generation: the long-term solution to poverty", Asian Development Review, vol. 8, No. 1 (1990), pp. 44-70.

54/ E. Ahmad and Y. Wang, "Inequality and poverty in China: institutional change and public policy, 1978 to 1988", World Bank Economic Review, vol. 5, No. 2 (May 1991), pp.231-257.

55/ S. Chakravarty, "Development strategy for growth with equity: the South Asian experience" Asian Development Review, vol. 8, No. 1 (1990), pp. 133-159.

56/ H. T. Oshima, loc. cit. The relative abundance of fertile land in Malaysia was especially helpful.

57/ R. Islam, "Rural poverty, growth and macroeconomic policies: the Asian experience", International Labour Review, vol. 129, No. 6 (1990), pp. 693-714.

58/ Especially, see the Report of the Secretary-General, "International co-operation for the eradication of poverty in developing countries" (A/44/467, 18 September 1989), pp. 17-20.

59/ M. S. Ahluwalia, loc. cit.

60/ See UNDP, Human Development Report, 1990 (Oxford, Oxford University Press, 1990), pp. 31-32.

61/ See A Survey of Childhood Hunger in the United States, report of the Community Childhood Hunger Identification Project, (Washington, D.C., Food Research and Action Centre, March 1991).

62/ See National Center for Children in Poverty, Five Million Children: A Statiscal Profile of our Poorest Young Citizens (New York, Columbia University, 1990), p. 27.

63/ "Poverty and the socio-economic attainment of women", World Economic Survey, 1991 (United Nations publication, Sales No. E.91.II.C.1), pp. 189-195.

64/ Gerd Holmboe-Otteson, Ophelia Mascarenhas and Margareta Wandel, "Women's role in food production and nutrition: implications for their quality of life", Food and Nutrition Bulletin, vol. 10, No. 3 (September 1988), pp. 8-15.

## Notes (continued)

65/ Haleh Afshar and Carolyn Dennis, eds., Women and Adjustment Policies in the Third World (New York, St. Martin's Press, 1992).

66/ Includes the Russian Federation and other republics of the former USSR. The terms "Soviet Union" and "USSR" will be used in relation to the situation prior to 1991.

67/ Includes Bulgaria, Czechoslovakia, German Democratic Republic (until unification with the Federal Republic of Germany on 3 October 1990), Hungary, Poland, Romania, Yugoslavia.

68/ "All that is required is that they (workers) should work equally - do their proper share of work - and get paid equally." V. I. Lenin, "The state and revolution" in Essential Works of Lenin, Henry M. Christian, ed. (New York, Bantam, 1966), p. 348.

69/ Family allowances were the only source of income that had a strong pro-poor bias. Households in lower deciles received more, not only in comparison to their incomes but also in absolute amounts. With a guaranteed minimum income, high family allowances and pensions related to previous earnings, there was no need for target cash transfers. Poverty should have been limited to isolated cases such as the disabled and alcoholics.

70/ The low share of pensions in incomes of Soviet households was due to relatively low Soviet pensions. It explains also the country's low share of cash transfers in gross incomes - below 15 per cent - as compared to other countries in the region. Soviet pensions in 1988 constituted 36.5 per cent of average state-sector wage, while in Bulgaria the percentage was 47.3; in Czechoslovakia, 48.7; in Hungary, 66.9; in Poland (1989), 45.4; and in Yugoslavia, 68.6 per cent. In consequence, Soviet pensioners tended to be poorer than in other countries in the region.

71/ See Katarzyna Tymowska and Marian Wisniewski, "Social security and health care in Poland", paper No. 16, Polish Policy Research Group, (Warsaw, Warsaw University, 1991).

72/ The social funds of enterprises were also expected to play a role in providing incentives. However, due to the "soft budget constraint", ultimately all enterprise losses were financed from the central budget.

73/ Data quoted by Henryk Flakierski, "Social policies in the 1980s in Poland: a discussion of a new approach" in Economic Reforms and Welfare Systems in the USSR, Poland and Hungary. Social Contract in Transformation, Jan Adam, ed. (London, MacMillan, 1991).

74/ In all countries in the region, private-sector activities were severely restricted and incomes controlled by tax policy (unpredictable and often acting retroactively) in order to prevent an accumulation of wealth.

75/ See Henryk Flakierski, Economic Reform and Income Distribution: A Case Study of Hungary and Poland (Armonk, N.Y., M. E. Sharpe, 1986), p. 26.

Notes (continued)

76/ See Janet Chapman, "Wage variation in Soviet industry: the impact of 1956-1960 reform", memorandum RM=6076-PR (Santa Monica, Rand Corporation, 1970). Similar policies were followed in other countries. Minimum and maximum ranges were also established for each category of worker. For example, the range for manual workers in Hungary in 1970 was 4-16 forint per hour. See Flakierski, op. cit., p. 168.

77/ It was achieved by an increase in the incomes of manual workers of 75 per cent between 1937 and 1960 and a decline in the incomes of non-manual workers of 20 per cent. See Michal Kalecki, Z zagadnien gospodarczo-spolecznych Polski Ludowej (Warsaw, PWE, 1964), pp. 91-101.

78/ The second, or shadow, economy is used to cover all activities outside the plan.

79/ The formal status of the second economy under socialism was not easy to define, and the distinction between legal and illegal activities was ambiguous. In general, there were three broad kinds of activities: those that evolved in support of activities within the planning system; those that met personal consumer demands for goods and services; and arbitrage and rent-seeking behaviour.

80/ In that way the workers in State enterprises captured a fraction of dissipated rent in the form of non-pecuniary benefits ("leisure on the job").

81/ See M. Matthews, Privilege in the Soviet Union (London, Allen and Unwin, 1978).

82/ See E. Mokrzycki, "The legacy of real socialism and western democracy", Studies in Comparative Communism, vol. XXIV, No. 2 (June 1991), pp. 212-213.

83/ The lack of entrepreneurship was one of the major deficiencies of the centrally planned economies. Efforts to stimulate innovations during the past two decades through material incentives brought poor results, spurring "fake" innovations. For further discussion, see chap. VII of World Economic Survey, 1992.

84/ They served also to "buy" social peace and reverse declining support for the Communist Party in the 1970s and 1980s. Party officials, in particular in Poland, negotiating with workers of big industrial units on strike, often promised additional allocations of scarce goods to local shops, car "vouchers" and other bonuses.

85/ These prices were not cheap, measured in terms of the amount of labour required to buy them. In 1988, the average Polish employee had to work twice as long as his counterpart in the Federal Republic of Germany to buy a given quantity of meat, 7 times longer to buy an egg, 9 times longer to buy a comparable motor car and 13 times longer to buy a colour television set. See Economic Survey of Europe, 1988-1989 (United Nations publication, Sales No. E.89.II.E.1), p. 121.

## Notes (continued)

86/ See Abram Bergson, "Income inequality under Soviet socialism", Journal of Economic Literature, vol. XII (September 1984); Henryk Flakierski, loc. cit.; Alan H. Gleb and Ceryl W. Gray, The Transformation of Economies in Central and Eastern Europe. Issues, Progress, and Prospects Washington, D.C., World Bank, 1991; Alistair McAuley, "The economic transition in Eastern Europe: Employment, income distribution, and the social security net", Oxford Review of Economic Policy, vol. 7, No. 4 (Winter 1991); Christian Morrisson, "Income distribution in East European and western countries" Journal of Comparative Economics, No. 8 (1984).

87/ Gini coefficients were calculated using national household sample surveys. Hungary has conducted these surveys every five years since 1962 and every two years since 1983; Poland and Yugoslavia, every five years since 1963. In 1980, Poland began to conduct the surveys annually, as did Yugoslavia in 1984. Czechoslovakia conducted household surveys in 1970, 1977 and 1988. Their results are not widely distributed. Data for Bulgaria, Romania and the Soviet Union are not readily available and are based on occasional surveys and estimates.

88/ The basic wage in socialist ideology was close to a monetary equivalent of the right to work.

89/ See Jan Winiecki, "Narrow wage differentials between blue-collar and while-collar workers and excess demand for manual labor in the CPEs: casually linked system-specific phenomena", Osteuropa-Wirtschaft, No. 3 (1988).

90/ In Czechoslovakia, farmers benefited from large subsidies to agriculture. Gains in farmers' incomes in Poland in the 1980s resulted mostly from strong lobbying, including that of "Rural Solidarity". Full-time private agriculture in Poland was not included in household surveys. Income differentials within this social group, as shown in several studies, have always been significant. See Eugeniusz Gorzelak, "Incomes of farmers' households in Poland", Oeconomica Polona, No. 5 (1987).

91/ Bergson, loc. cit., thought that inequalities in the USSR could be as high or higher than in Sweden and not lower than in the United Kingdom in the 1970s (p. 1073), and the estimates of Morrisson, loc. cit. suggest that the magnitude of income inequality, except in Czechoslovakia, was comparable to that in western Europe.

92/ Calculations of Kozponti Statisztical Hivatal, based on "Subsidy-income study: the effect of budgetary consumer and housing subsidies on the income distribution of the households in Hungary", prepared with the Ministry of Finance of Hungary and the World Bank in October 1989 and quoted in Hungary, Reform of Social Policy and Expenditures (Washington, D.C., World Bank, 1991).

93/ Estimates quoted by Bartlomiej Kaminski, The Collapse of State Socialism. The Case of Poland (Princeton, Princeton University Press, 1991), p. 183.

## Notes (continued)

94/ G. Gukasov and V. Tolstov data from Izviestiia (19 August 1985), quoted by Hewett, Reforming the Soviet Economy: Equality or Efficiency? (Washington, D.C., Brookings Institution, 1988), p. 180; and L. Roucek, "Enterprise in the Soviet political debates", Soviet Studies, vol. XI, No. 1 (January 1988).

95/ G. Manz points out a variety of second-economy activities in the German Democratic Republic, where a special role was played by the mark of the Federal Republic as "second currency". See G. Manz, "Schattenwirtschaft in der DDR", Wirtschaftswissenschaft, vol. 38, No. 2 (1990), pp. 219-229.

96/ P. G. Hare, "The assessment: microeconomics of transition in Eastern Europe", Oxford Review of Economic Policy, vol. 7, No. 4, p. 8.

97/ According to the government statistical office, total earnings in the second economy in that year have been estimated at 99.8 billion roubles, of which bribes and tips were 27.3 billion; profits from speculation in producer goods, building materials, spare parts and petrol, 23.1 billion; and from other sources - tax evasion, theft, drugs and smuggling, 14.4 billion. (See Ekonomika i zhizn', No. 36 (September 1991), p. 6.

98/ L. Csaszi, "Interpreting inequalities in the Hungarian health system", Social Science and Medicine, vol. 31, No. 8 (1990).

99/ ILO estimates, quoted by Michael Cichon, "Health sector reforms in central and eastern Europe: Paradigm reversed?", International Labour Review, vol. 130, No. 3 (1991), p. 324.

100/ Some have suggested that the communist nomenclatura had, in fact, many characteristics of a new class with specific property rights to the nation's resources. See Jan Winiecki, Resistance to Change in the Soviet Economic System: A Property Rights Approach (London, Routledge, 1991).

101/ Population and Housing Census in the People's Republic of Bulgaria held on the 4th of December 1985. Methodology and Main Results (Sofia, Central Statistical Office, 1988), p. 291.

102/ Household survey data, quoted by A. Kondratowicz, and M. Okolski, "The Polish economy on the eve of the Solidarity take-over", paper No. 4, Polish Policy Research Group (Warsaw, Warsaw University, 1991), p. 14.

103/ Housing survey data, quoted by Danuta Duch and Magdalena Sokolowska, "Health inequalities in Poland", Social Science and Medicine, vol. 31, No. 3, p. 347.

104/ Duchomir Minev and others, "The Bulgarian country profile: the dynamics of some inequalities in health", Social Science and Medicine, vol. 31, No. 8 (1990), pp. 837-846.

## Notes (continued)

105/ Data from Rocznik Demograficzny, quoted and analysed by Edmund Wnuk-Lipinski, "The Polish country profile: economic crisis and inequalities in health", Social Science and Medicine, vol. 31, No. 8 (1990), p. 862.

106/ UNDP, Human Development Report, 1991, (Oxford, Oxford University Press, 1991), p. 26.

107/ Poverty incomes are those below the subsistence minimum calculated by official institutions in each country as a percentage of the average income. That percentage varied between 40 per cent in Czechoslovakia to almost 60 per cent in Hungary. The subsistence minimum was not used as an eligibility criterion for assistance.

108/ Branko Milanovic, "Poverty in Eastern Europe in the years of the crisis, 1978 to 1987: Poland, Hungary, and Yugoslavia", World Bank Economic Review, vol. 5, No. 2 (1991), pp. 187-205.

109/ Smeeding and others, "Poverty in Eastern Europe: lessons from cross-national income comparisons from the Luxembourg Income Study", seminar paper prepared for the Conference on Poverty Measurement for Economies in Transition, 7-9 October 1991.

110/ N. Rimashevskaja, "Uzlovia problema perekhodnogo perioda", Voprosy ekonomiki, No. 1 (1990), pp. 33-36.

111/ L. Zubova and others, discuss the issue of poverty based on an all-union population poll conducted in September 1990 by the Center for Public Opinion and Market Research in Moscow. See "Bednost' v SSSR: toczka zrenia naseleniia", Voprosy ekonomiki, No. 6 (1991), pp. 60-67.

112/ See Children and the Transition to the Market Economy, Giovani Andrea Cornia and Sandor Sipos, eds. (Aldershot, Avebury, 1991).

113/ See also L. Gilejko, in Klasa robotnicza w spoleczenstwie socjalistycznym, A. Wajda, ed. (Warsaw, PWE Publishers, 1979), pp. 210-229; S. Nowak, "Values and attitudes of the Polish people", Scientific American, vol. 245, No. 1 (July 1981), pp. 45-53.

114/ See especially Oscar Lange, "On the economic theory of socialism", Review of Economic Studies, vol. 4, Nos. 1 and 2 (October 1936 and February 1937). Lange's equilibrium implied, however, conditions such as the absence of short-run scarcities and the complete equalization of educational opportunities, including the selection process, and ignored to a large extent questions of incentives. See A. Sen, On Economic Equality (Delhi, Oxford University Press, 1989), pp. 91-92.

Notes (continued)

115/ See especially J. Kornai, "Efficiency and the principles of the socialist ethic", reprinted in J. Kornai, Contradictions and Dilemmas (Budapest, Corvina, 1985); H. Daly, "Discussion: equity and efficiency problems of implicit redistribution" in Distributional Conflicts in Environmental Resource Policy, A. Schaiberg and others, eds. (New York, St. Martin Press, 1986); M. Friedman, Capitalism and Freedom (Chicago, University of Chicago Press, 1982); and A. Okun, Equality and Efficiency: The Big Trade-off (Washington, D.C., Brookings Institution, 1975).

116/ As pointed out bitterly by the participants of the Fourth Congress of "Solidarity" in Gdansk: "We were not jailed not to be able to get enough food for our children". See Jagienka Wilczak "Pozegnanie a mitem", Polityka (20 June 1992).

117/ L. Deniszczuk and I. Zukowska, "Ile i na co w budzecie domowym", Zycie Gospodarcze, No. 40 (1991), p. 8.

118/ General Assembly resolution 45/199 of 21 December 1990.

119/ Karl Ove Moene, "Poverty and landownership", American Economic Review, vol. 82, No. 1 (1992), pp. 52-64.

120/ Report of the Secretary-General on international cooperation ... (A/46/454), p. 29.

121/ M. S. Ahluwalia, loc. cit., pp. 116-117.

# Chapter VIII

# GOVERNMENT EXPENDITURE ON SOCIAL SERVICES

The present chapter focuses on government expenditure on social services. Other parts of the report provide analyses of sectoral issues (see chap. III, Health, chap. IV, Education and literacy, chap. V, Housing and sanitation and chap. XII, Financial crisis and reform in social security). This chapter highlights some salient features in patterns of public expenditure on social services against a background of growing pressure from competing priorities and social needs. It does not cover private sector expenditure. In many countries, the private sector provides a large range of social services, and private expenditure has become an important complement to public spending.

Government expenditure on social services has been subject to severe pressure imposed by tightening fiscal constraints. Historically, higher economic growth has permitted Governments to increase social spending without swelling budget deficits and subsequent inflation. Slow economic growth in virtually all parts of the world has closed this source of growth. As the level of government expenditure on social services rose as a percentage of total expenditure, it has become more and more difficult for Governments to syphon off incomes in taxes to pay for the higher expenditure. At the same time, the priorities for public spending have become politically controversial. In many developing countries, debt servicing and military spending claim large proportions of public expenditure at the cost of both capital expenditure and social services. Several demographic factors, including patterns of population growth, ageing, changes in dependency ratios, a surge in the number of one-parent families and the increasing participation of women in the labour force, have affected public expenditure patterns.

A problem of major significance is the spread of HIV and AIDS. Of the 12 million people infected with HIV, some 6 million are in Africa. Of the 1.5 million AIDS cases, some 750,000 are in Africa. As much as 70 per cent of all hospital beds in some countries in Africa are occupied by AIDS patients. In addition, there is the need for resources and facilities to care for the elderly and for children orphaned because of the death of their parents from AIDS. Finally, there is the problem of looking after young families whose breadwinner has been claimed by AIDS.

A word of caution on the coverage of the statistical data used in this chapter is in order. First, it is necessary to note that the figures relate to central government expenditure only. In most countries, the share of local government expenditure on social services compared to central government expenditure was negligible. In contrast, in some countries, including Brazil, India and the United States, the share of state and local government expenditure in sectors such as health and education was quite large. In the latter group of countries, government expenditure on social services is larger than reported here. The figures used also do not include health expenditure by social security institutions mainly because there are no comparable data.

## A. Patterns of expenditure

### 1. Developing countries

During the 1980s, total government expenditure as a ratio of gross domestic product (GDP) rose slightly in all developing countries, and it did not drop in any region (see table VIII.1). GDP per capita growth was in real terms dramatically below that in the 1970s and previous decades in Latin America, Africa and West Asia. In real terms, GDP per capita was lower in many of these countries in 1990 than in 1981. The decline in GDP per capita combined with only a slight increase in the ratio of government expenditure in GDP translated into markedly lower growth in per capita real public sector expenditure on social services. As a result, in many countries, public sector expenditure on social services per capita in 1990 was no higher than in 1981. These reductions necessarily would have led to reductions in the quantity and quality of social services. 1/

Programmes of economic stabilization in the developing countries restrained growth in government expenditure. The restraints were made necessary by two sets of forces. The first was slow growth in government revenue, especially where the revenue depended on exports and imports. The fall in export prices and volume and in total external trade reduced revenue from taxes on international trade. The second was the need to keep budget deficits low to maintain price stability. 2/ In Latin America, central government budget deficits, which averaged nearly 7 per cent of GDP from 1981 to 1988, were reduced to 2.3 per cent during the period 1989-1991. In other regions, efforts to restore macroeconomic balance sometimes created a more complicated picture. In Africa, foreign debt service, high real interest rates and adverse terms of trade continued to be important determinants of government deficits, and only a few countries, including Ghana and Mauritius, were able to improve their fiscal position. In West Asia, almost all countries ran increased budget deficits to finance the Persian Gulf war and to cope with its aftermath, including refugees and displaced persons.

Out of this stagnant government expenditure, it was necessary to pay a high proportion as interest on public debt, both domestic and foreign. Military expenditure absorbed a growing proportion in many countries. These factors reduced the total of government expenditure available for other purposes, including social services. In 64 developing countries, combined health care and education fell from 19.7 to 18.4 per cent of the budget, while interest and defence expenditure rose from 19.7 to 24.2 per cent between 1980-1982 and 1985-1987. 3/ In a large number of developing countries, more funds were allocated for defence and debt servicing than for health care and education, and the imbalance became more serious during the 1980s. By the end of the 1980s, military expenditure, including spending on arms imports, began to decline in several developing countries.

In Africa, among the 29 countries for which there were data, total government expenditure in real terms was lower in 1987-1989 than in 1980-1983 in 11 countries and total government expenditure in real terms after payment of interest on the public debt was lower in 13 countries (see table VIII.2). In the Congo, Gabon, Nigeria and Sierra Leone, the central Government spent about half as much in 1987-1989 as in 1980-1983. The situation was nowhere

Table VIII.1. Selected categories of central government expenditure as a proportion of total expenditure

| Functions | Year | All developing countries | Africa | Asia | Latin America | Low-income | Heavily indebted |
|---|---|---|---|---|---|---|---|
| 1. Total central government expenditure as a ratio of GDP | 1980 | 23.14 (42) | 28.06 (9) | 21.38 (15) | 22.15 (18) | 23.17 (13) | 18.54 (11) |
| | 1990 | 23.84 | 29.74 | 22.30 | 22.18 | 24.12 | 19.51 |
| 2. Education | 1980 | 14.11 (39) | 17.12 (10) | 11.41 (15) | 14.86 (14) | 10.59 (12) | 13.01 (8) |
| | 1990 | 14.76 | 17.54 | 13.96 | 13.64 | 12.26 | 12.13 |
| 3. Health | 1980 | 6.68 (39) | 6.41 (10) | 4.91 (15) | 8.77 (14) | 5.25 (12) | 5.49 (8) |
| | 1990 | 6.42 | 6.57 | 4.64 | 8.23 | 4.62 | 4.12 |
| 4. Housing | 1980 | 2.94 (38) | 3.30 (10) | 2.90 (14) | 2.72 (14) | 1.39 (11) | 2.04 (8) |
| | 1990 | 3.32 | 3.53 | 3.56 | 2.92 | 3.40 | 0.78 |
| 5. Interest payments a/ | 1980 | 6.59 (39) | 5.84 (11) | 6.25 (13) | 7.44 (15) | 6.31 (11) | 7.97 (9) |
| | 1990 | 12.84 | 10.59 | 14.61 | 12.96 | 13.55 | 18.79 |
| 6. Capital expenditure a/ | 1980 | 22.17 (41) | 22.02 (10) | 25.02 (14) | 19.92 (17) | 23.18 (11) | 15.15 (9) |
| | 1990 | 19.83 | 22.44 | 21.67 | 16.79 | 24.16 | 12.99 |

Source: United Nations/DESD, based on Government Finance Statistics Yearbook, 1987 and 1991 (Washington, D.C., IMF).

Note: The figures in parentheses indicate the number of countries in each category; the countries may not be necessarily the same in each case.

a/ Total expenditure and lending minus repayments.

Table VIII.2. Sub-Saharan Africa: indices of total government expenditure, including interest payments and net of interest payments, and on health and education, in real terms

(1980-1983 = 100)

| Countries | 1980-1983 | Total<br>1984-1986 | Total<br>1987-1989 | Net of interest<br>1984-1986 | Net of interest<br>1987-1989 | Health<br>1984-1986 | Health<br>1987-1989 | Education<br>1984-1986 | Education<br>1987-1989 |
|---|---|---|---|---|---|---|---|---|---|
| Botswana | 100.0 | 145.9 | 233.3 | 143.9 | 230.7 | 144.3 | 232.3 | 133.1 | 202.6 |
| Burkina Faso | 100.0 | 108.5 | 138.4 | 102.3 | 129.3 | 94.0 | 111.7 | 112.7 | 113.4 |
| Burundi | 100.0 | 100.5 | 125.4 | 96.0 | 118.9 | .. | .. | .. | .. |
| Cameroon | 100.0 | 145.9 | 120.6 | 142.8 | 120.2 | 172.9 | 118.5 | 173.2 | 160.4 |
| Congo | 100.0 | 95.6 | 61.0 | 88.3 | 55.6 | .. | .. | .. | .. |
| Côte d'Ivoire | 100.0 | 89.5 | 52.3 | 50.5 | 33.7 | 108.7 | – | 101.9 | – |
| Ethiopia | 100.0 | 101.3 | 131.3 | 98.5 | 132.7 | 106.4 | 135.0 | 116.4 | 139.9 |
| Gabon | 100.0 | 114.6 | 61.2 | 113.2 | 52.2 | .. | .. | .. | .. |
| Gambia | 100.0 | 90.9 | 101.3 | 89.8 | 90.8 | – | – | 59.4 | 36.0 |
| Ghana | 100.0 | 136.9 | 198.0 | 137.1 | 207.6 | – | – | 145.1 | 236.4 |
| Kenya | 100.0 | 95.7 | 118.7 | 89.0 | 112.5 | 86.1 | 101.5 | 101.4 | 133.8 |
| Lesotho | 100.0 | 106.5 | 133.4 | 107.7 | 130.7 | – | – | 98.0 | 143.1 |
| Liberia | 100.0 | 80.2 | – | 71.7 | 66.7 | 68.5 | 71.3 | 82.7 | 76.2 |
| Madagascar | 100.0 | 78.8 | 95.1 | 73.8 | 87.5 | 96.6 | 106.2 | 85.1 | 87.2 |
| Malawi | 100.0 | 96.5 | 81.2 | 89.4 | 74.3 | 128.1 | 103.4 | 98.5 | 84.2 |
| Mauritius | 100.0 | 99.2 | 128.4 | 93.7 | 129.6 | 113.9 | 151.0 | 90.1 | 122.2 |
| Niger | 100.0 | 90.9 | 104.7 | 84.7 | 94.5 | 108.3 | 136.7 | 88.4 | 97.9 |
| Nigeria | 100.0 | 47.7 | 88.2 | 38.6 | 51.2 | 42.3 | 49.5 | 45.8 | 29.7 |
| Rwanda | 100.0 | 118.7 | 139.4 | 116.8 | 136.4 | .. | .. | .. | .. |
| Senegal | 100.0 | 94.0 | 92.3 | 97.7 | 113.7 | 75.4 | – | 76.9 | – |
| Sierra Leone | 100.0 | 38.7 | 55.4 | 37.3 | 48.0 | – | – | 36.9 | 17.2 |
| Somalia | 100.0 | 100.7 | 148.8 | 90.1 | 132.2 | .. | .. | .. | .. |
| Sudan | 100.0 | 105.0 | 113.2 | 88.3 | 99.5 | .. | .. | .. | .. |
| Swaziland | 100.0 | 94.2 | 89.4 | 91.0 | 86.1 | 109.4 | 125.0 | 100.3 | 108.5 |
| Togo | 100.0 | 126.7 | 121.3 | 128.1 | 122.1 | – | – | 90.3 | 95.3 |
| Uganda | 100.0 | 154.6 | 102.4 | 141.9 | 101.1 | 98.2 | 75.9 | 163.6 | 95.5 |
| United Republic of Tanzania | 100.0 | 64.8 | 69.8 | 63.4 | 64.3 | .. | .. | .. | .. |
| Zambia | 100.0 | 93.5 | 84.7 | 93.0 | 92.2 | 79.9 | 96.6 | 106.6 | 81.7 |
| Zimbabwe | 100.0 | 102.9 | 118.9 | 99.2 | 110.3 | 105.6 | 137.6 | 109.6 | 130.9 |

Table VIII.2 (continued)

| Countries | 1980-1983 | Total |  | Net of interest |  | Health |  | Education |  |
|---|---|---|---|---|---|---|---|---|---|
|  |  | 1984-1986 | 1987-1989 | 1984-1986 | 1987-1989 | 1984-1986 | 1987-1989 | 1984-1986 | 1987-1989 |
| Average | 100.0 | 100.7 | 111.0 | 95.1 | 104.3 | 103.6 | 116.8 | 105.9 | 110.0 |
| Oil exporting | 100.0 | 101.0 | 82.7 | 95.7 | 69.8 | 107.6 | 84.0 | 109.5 | 95.1 |
| Middle income | 100.0 | 104.0 | 105.9 | 95.7 | 96.6 | 113.9 | 135.6 | 106.5 | 128.2 |
| Low income | 100.0 | 99.2 | 113.4 | 94.8 | 107.7 | 96.2 | 104.3 | 98.8 | 99.6 |

Source: United Nations/DESD, based on D. B. Sahn, "Public expenditures in sub-Saharan Africa during a period of economic reforms, World Development, vol. 20, No. 5 (London, 1992).

more serious than in Côte d'Ivoire, where the index of total government expenditure in real terms after payment of interest on the public debt in 1987-1989 was only a third of that in 1980-1983.

The share of interest payments in total government expenditure in the 1980s increased dramatically, while expenditure on social services either stagnated or declined. Interest payments nearly doubled, from 7 per cent to 13 per cent, in all developing countries, the relative increase being higher in Asia and Africa than in Latin America. In 1990, interest payments claimed a larger share of government expenditure than health and housing combined, and in the heavily indebted countries, the share allocated for interest repayments was larger than the combined share of education, health and housing (see table VIII.1).

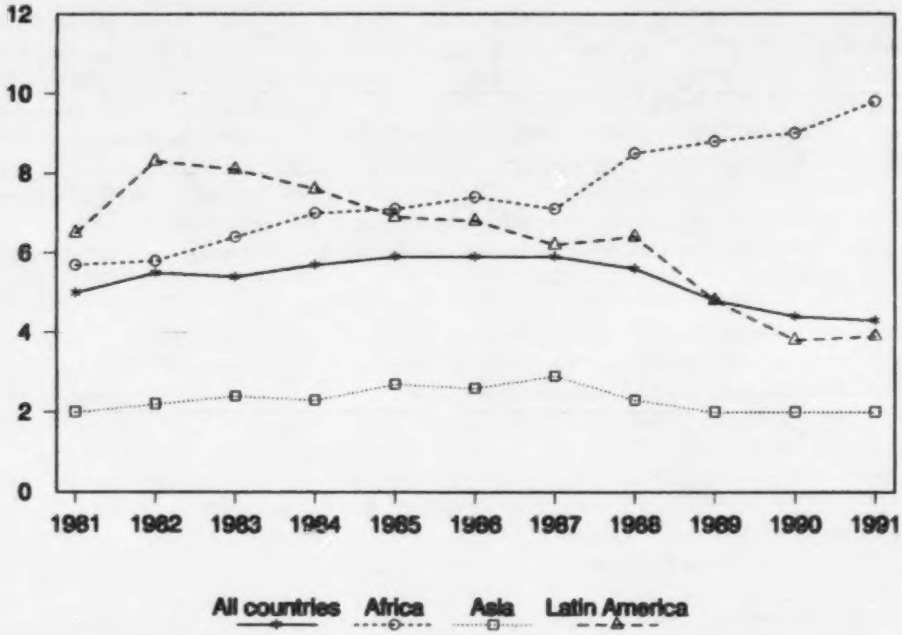
The massive increase in interest during the 1980s was a large drain on the entire national economy. In Mexico, in recent years, interest on foreign debt absorbed 4 to 5 per cent of total output, in Argentina, 2 to 3 per cent, and in Brazil, 3 to 4 per cent. 4/ Total debt service payments in all developing countries in 1990-1991 were larger than interest payments by a factor of two, although varying significantly across regions (see fig. VIII.1). The situation improved somewhat with the fall of interest rates at the end of the 1980s. The ratio of debt service to gross national product (GNP) in all developing countries fell from 5.0 in 1981 to 4.3 in 1991; in Africa during the same period this ratio increased from 5.7 to 9.8 per cent; in Asia it stayed steady at 2.0 per cent, and in Latin America it decreased from 6.5 to 3.9 per cent. 5/

Total real government expenditure, net of interest payments, rose even more slowly. In sub-Saharan Africa, by the end of the decade, government expenditure net of interest payments was 5 per cent higher than in 1980; however, government expenditure after interest payments on a per capita basis was approximately 15 per cent lower at the end of the decade than in 1980 (see table VIII.2). 6/ Between 1984-1986 and 1987-1989, expenditure on health care declined in 6 out of 15 countries, and on education in 11 out of 21 countries.

Governments may have had little choice in determining some payments. Debt-service payments were largely outside governments' control because they were determined by the accumulated debt and changes in international interest rates.

As discussed in chapter XII, civil wars have been a common factor in many developing countries, especially in Africa, Asia and West Asia. The maintenance of law and order is a prior condition for providing even the most elementary social services and its breakdown in Liberia, Somalia and the former Yugoslavia have created inhuman conditions for citizens. Some expenditure on police services, at times supplemented by larger and stronger forces, becomes essential and voices denouncing all increases in defence expenditure, regardless of the law and order situation, probably overstate their case. It is without a doubt preferable that expenditure on social services should have precedence over expenditure on the military. In some instances this policy may be impractical. However, military power is not a substitute for popular support for Governments and defence and military expenditure undertaken to keep an unpopular Government in power cannot be justified. Increases in defense expenditure when there is competition among

**Figure VIII.1. Ratio of debt service to GNP in capital-importing developing countries**



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Source: UN/DESD.

rival neighbours distrusting each other is often at the expense of sectors that improve living conditions and productive capacity. Table VIII.3 shows the enormous disparities between evident priorities in providing for defence and social services.

The proportion of capital expenditure in total government expenditure fell from 22 per cent to 20 per cent. The drop was markedly high in Asia and Latin America. The proportion, in fact, increased in Africa. Generally, capital expenditure on social services was cut more sharply than current expenditure. Out of nine Latin American countries, capital expenditures in total expenditures on social services fell in all five countries for which there were data. 7/ In sub-Saharan Africa in the mid-1980s, many Governments attempted to maintain current expenditure at the expense of investment. This tendency gave way to a greater emphasis on investment towards the end of the decade as the economic crisis eased. 8/

Current expenditure on social services was too large a component of total expenditure to go unscathed. The public wages bill shrank in Latin America, while in Asia and Africa the overall wage bill largely held steady. It was an erosion of real wages rather than staffing cuts that brought reductions in the wage bill. In many countries, real wages for those employed in social services fell significantly. Because of cuts in current expenditure (and the scarcity of funds for specialists, essential drugs and other things), capital assets such as schools or health clinics stayed underutilized, creating an important long-term disinvestment in human capital.

The fall in public wages had two negative effects on the provision of social services. First, it reduced the earned income of a sizeable portion of the population at large so that families had fewer resources to allocate for health care, food and education. Secondly, since the wages of social services providers fell, sometimes drastically, qualified people left their posts for jobs in the private sector or abroad or were forced to spend much of their time earning money outside their normal work. 9/ As a result, the quality of service suffered even further. For instance, teachers supplemented their income by teaching night school, resulting in chronic fatigue and inadequate preparation and patience for the stress and strain of the classroom. The struggle for survival amid shortages often forced teachers, as well as everyone else, to invent schemes to supplement household income, including those that stretch the definitions of what is legal and ethical. 10/ In Africa and Latin America, where the level of real wages declined most, the social sector, which is heavily dependent on recurrent expenditure and skilled public workers, was disproportionately hurt.

Shares of central government expenditure allocated to components of social services varied among the developing countries (see table VIII.4). At the beginning of the 1990s, expenditure on education and health services exceeded 20 per cent of the total in Fiji, Myanmar, the Republic of Korea, Singapore, Thailand and the Philippines, 15 per cent in Bangladesh, Bhutan, Nepal, Sri Lanka, Tonga and Vanuatu and 10 per cent in Indonesia, and was less than 5 per cent in India and Pakistan. Expenditure on social security and welfare typically absorbed much less than 10 per cent of total expenditure in Africa and Asia. In Latin America, the share was higher, in exceptional cases exceeding half, as in Uruguay, 40 per cent in Argentina and 20 per cent in

Table VIII.3. Ratios of military:social services expenditure and soldiers:teachers expenditure, on selected countries, 1987-1989

| Military:social services | | Soldiers:teachers | |
|---|---|---|---|
| | **Highest** | | |
| Iraq | 511 | Iraq | 625 |
| Somalia | 500 | Somalia | 591 |
| Nicaragua | 318 | Ethiopia | 416 |
| Oman | 268 | Nicaragua | 350 |
| Ethiopia | 239 | Syrian Arab Republic | 302 |
| Pakistan | 239 | Mauritania | 300 |
| Syrian Arab Republic | 204 | Viet Nam | 291 |
| Saudi Arabia | 177 | Singapore | 280 |
| United Arab Emirates | 174 | United Arab Emirates | 269 |
| Bolivia | 144 | Cyprus | 260 |
| | **Lowest** | | |
| Algeria | 18 | Zaire | 17 |
| Botswana | 16 | Mexico | 17 |
| Côte d'Ivoire | 14 | Trinidad and Tobago | 15 |
| Ghana | 13 | Sri Lanka | 15 |
| Siera Leone | 11 | Indonesia | 15 |
| Fiji | 9 | Côte d'Ivoire | 14 |
| Jamaica | 9 | Jamaica | 10 |
| Mexico | 8 | Ghana | 9 |
| Mauritius | 5 | Kenya | 8 |
| Costa Rica | 4 | Costa Rica | 0 |

Source: United Nations Development Programme, Human Development Report, 1992 (New York, Oxford University Press), p. 87.

Table VIII.4. Expenditure on social services and defence as a percentage of total central government expenditure in developing countries

| | Education | | Health | | Housing and community amenities | | Social security and welfare | | Defence | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 |
| **AFRICA** | | | | | | | | | | |
| Botswana a/ | 21.16 | 20.16 | 5.95 | 4.77 | 6.64 | 8.93 | 0.27 | 1.64 | 8.72 | 11.60 |
| Burkina Faso b/ | 15.78 | 13.97 | 5.82 | 5.22 | 0.20 | 0.22 | 6.70 | 8.35 c/ | 18.41 | 17.85 |
| Cameroon a/ | 7.48 | 11.98 | 2.74 | 3.35 | 1.44 | 2.31 | 3.67 | 6.43 | 5.07 | 6.67 |
| Ethiopia b/ | 9.82 | 10.57 | 3.65 | 3.56 | 1.36 | 4.11 | 4.62 | 5.16 | .. | .. |
| Ghana d/ | 17.09 | 25.71 | 6.39 | 8.95 | 1.66 | 5.00 | 7.16 | 6.88 | 6.32 | 3.20 |
| Kenya a/ | 20.58 | 19.80 | 7.81 | 5.36 | 4.83 | 3.46 | 0.14 | 0.14 | 10.73 | 7.76 |
| Liberia c/ | 15.97 | 14.17 | 7.61 | 5.70 | 2.78 | 0.99 | 2.57 | 0.84 | 11.29 | 7.67 |
| Malawi a/ | 11.06 | 8.83 | 5.16 | 7.42 | 1.65 | 3.17 | 1.21 | 0.13 d/ | 8.41 | 5.35 |
| Mauritius | 15.79 | 14.30 | 6.97 | 9.32 | 3.37 | 4.12 | .. | 15.23 | 2.24 | 1.81 |
| Morocco b/ | 16.59 | 17.02 | 3.05 | 3.04 | 0.97 | 0.41 | 4.59 | 6.93 | 16.33 | 15.14 |
| Swaziland | 21.18 | 25.42 | 5.41 | 8.48 | 10.52 | 5.37 | - | 1.06 | 6.09 | 4.40 |
| Togo b/ | 16.67 | 19.90 | 5.27 | 5.20 | 3.17 | 1.43 | 8.78 | 7.05 | 7.19 | 11.14 |
| Tunisia a/ | 15.29 | 16.34 | 7.65 | 6.12 | 5.38 | 2.02 | 8.26 | 12.35 | 8.35 | 6.49 |
| Uganda c/ | 12.63 | 15.01 | 5.88 | 2.39 | 2.91 | 0.77 | .. | 2.12 | 31.18 | 26.34 |
| Zambia d/ | 11.87 | 8.62 | 6.05 | 7.43 | 0.41 | 0.47 | 2.18 | 1.52 | .. | .. |
| Zimbabwe a/ | 20.04 | 23.45 | 7.12 | 7.63 | 1.08 | 0.47 | 6.69 | 3.41 | 20.54 | 16.49 |
| **ASIA** | | | | | | | | | | |
| Bangladesh a/ | 8.75 | 11.24 | 5.65 | 4.80 | 1.23 | 0.45 | 1.70 | 7.54 | 7.94 | 10.10 |
| Fiji | 19.87 | 23.77 | 7.72 | 7.66 | 1.39 | 1.94 | 2.67 | 6.21 | 3.32 | 7.69 |
| India a/ | 1.87 | 2.47 | 1.99 | 1.60 | .. | 6.86 | .. | .. | 20.77 | 17.05 e/ |
| Indonesia a/ | 7.93 | 8.43 | 2.49 | 1.99 | 1.19 | 1.54 | - | - | 12.71 | 8.02 |
| Maldives e/ | 8.21 | 14.33 | 4.52 | 18.43 | 11.16 | 5.29 | 3.87 | 1.57 | - | - |
| Myanmar a/ | 10.11 | 16.78 | 6.09 | 4.65 | 3.39 | 8.41 | 5.83 | 6.98 | 21.70 | 24.66 |
| Nepal | 9.69 | 10.95 | 4.11 | 4.66 | 0.96 | 6.76 | 0.55 | - | 6.53 | 5.87 |
| Pakistan | 3.08 | 1.64 | 1.58 | 0.97 | 3.84 | 2.39 | 3.37 | 0.98 | 28.51 | 27.87 |
| Papua New Guinea d/ | 16.14 | 15.33 | 8.99 | 9.42 | 2.11 | 2.62 | 0.15 | 0.51 | 3.96 | 4.69 |
| Philippines e/ | 15.95 | 16.92 | 5.01 | 4.08 | 4.60 | 0.64 | .. | 1.63 | 14.21 | 11.04 |
| Republic of Korea e/ | 17.95 | 19.63 | 1.32 | 2.20 | 0.75 | 2.56 | 5.97 | 9.67 | 35.19 | 25.77 |
| Singapore a/ | 19.20 | 18.06 | 7.23 | 4.67 | 7.05 | 9.52 | 1.38 | 2.15 | 21.89 | 21.63 |
| Solomon Islands d/ | 14.70 | 22.38 | 10.16 | 6.21 | 8.10 | 2.68 | 2.68 | 0.76 | - | - |
| Sri Lanka | 8.17 | 10.21 | 3.94 | 6.69 | 4.81 | 3.01 | 12.11 | 16.74 | 1.85 | 6.81 |
| Thailand e/ | 18.89 | 20.08 | 4.17 | 6.77 | 2.91 | 2.17 | 2.53 | 3.60 | 20.15 | 17.33 |
| Vanuatu a/ | 23.31 | 12.62 | 10.88 | 6.57 | - | 0.03 | 0.92 | 0.89 c/ | - | - |

Table VIII.4 (continued)

| | Education | | Health | | Housing and community amenities | | Social security and welfare | | Defence | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 |
| WEST ASIA | | | | | | | | | | |
| Bahrain e/ | 9.68 | 14.55 | 7.57 | 7.67 | 12.78 | 2.42 | 2.26 | 2.33 | 21.23 | 16.14 |
| Egypt a/ | 8.55 | 13.39 | 2.24 | 2.78 | 2.89 | 5.76 | 12.11 | 12.00 | 13.53 | 12.66 |
| Iran (Islamic Republic of) a/ | 15.88 | 21.96 | 5.45 | 8.55 | 2.48 | 3.63 | 9.00 | 14.74 | 11.74 | 13.60 |
| Israel e/ | 8.51 | 10.24 | 3.52 | 4.09 | 0.20 | 2.90 | 13.70 | 21.45 | 31.12 | 25.44 |
| Jordan a/ | 7.60 | 14.16 | 3.75 | 5.83 | 0.76 | 2.00 | 13.74 | 9.72 | 25.27 | 23.12 |
| Kuwait a/ | 8.96 | 14.00 | 4.89 | 7.45 | 6.17 | 7.89 | .. | 12.58 | 9.78 | 19.89 |
| Oman e/ | 5.28 | 10.68 | 3.04 | 4.64 | 1.63 | 6.66 | - | 2.37 | 50.77 | 40.99 |
| Syrian Arab Republic a/ | 7.12 | 8.58 | 1.08 | 1.32 | 3.17 | 0.89 | 8.23 | 2.44 | 37.73 | 40.67 |
| United Arab Emirates a/ | 7.56 | 14.97 | 6.20 | 6.91 | 1.28 | 0.41 | 2.53 | 3.17 | 41.10 | 43.93 |
| Yemen a/ | 14.79 | 19.42 | 3.58 | 3.92 | - | - | - | - | 32.14 | 31.32 |
| LATIN AMERICA AND CARIBBEAN | | | | | | | | | | |
| Argentina d/ | 7.31 | 9.32 | 1.36 | 2.03 | 0.34 | 0.36 | 33.86 | 40.50 | 11.44 | 8.58 |
| Bahamas c/ | 20.79 | 17.75 | 13.80 | 13.45 | 0.07 | 0.35 | 6.65 | 9.34 | 2.24 | 2.30 |
| Barbados a/ | 19.45 | 18.64 | 10.76 | 11.93 | 6.00 | 3.72 | 14.27 | 21.61 | 3.50 | 1.87 |
| Belize | 15.82 | 15.74 | 8.89 | 7.76 | 3.14 | 8.62 | - | 3.31 | 4.19 | 3.79 |
| Bolivia e/ | 24.53 | 18.00 | 7.08 | 2.32 | 1.89 | 0.19 | - | 17.73 | 22.64 | 14.10 |
| Brazil a/ | 3.85 | 5.31 | 7.36 | 7.21 | 0.20 | 0.23 | 34.60 | 19.92 | 3.43 | 4.23 |
| Chile d/ | 14.73 | 10.08 | 6.54 | 5.85 | 4.73 | 4.03 | 36.63 | 29.84 | 12.23 | 8.40 |
| Costa Rica e/ | 23.66 | 18.98 | 29.74 | 26.26 | 2.33 | 1.07 | 10.27 | 13.79 | 2.64 | 1.68 b/ |
| Dominican Republic d/ | 13.92 | 9.27 | 9.70 | 10.21 | 6.07 | 15.02 | 7.47 | 3.30 | 8.88 | 4.50 |
| El Salvador e/ | 17.85 | 16.17 | 8.39 | 7.81 | 1.63 | 2.25 | .. | 3.22 | 10.54 | 24.51 |
| Mexico e/ | 18.19 | 13.86 | 1.86 | 1.91 | 4.09 | 0.61 | 14.70 | 12.39 | 2.48 | 2.36 |
| Netherlands Antilles b/ | 5.61 | 4.28 | 5.64 | 5.18 | 8.51 | 3.91 | 27.89 | 27.72 | - | 0.09 |
| Panama a/ | 12.78 | 18.52 | 13.24 | 17.94 | 3.52 | 3.90 | 9.30 | 20.15 | - | 7.86 |
| Paraguay e/ | 11.76 | 12.67 | 4.51 | 4.32 | 3.73 | 3.05 | 19.03 | 11.79 | 13.15 | 13.29 |
| Peru e/ | 11.36 | 16.19 | 5.30 | 5.06 | 0.93 | 0.13 | .. | - | 13.82 | 11.18 |
| Saint Vincent and the Grenadines d/ | 15.56 | 17.30 | 9.97 | 13.41 | .. | 3.89 | - | 2.30 | 6.12 | 6.43 |
| Uruguay e/ | 7.67 | 7.37 | 3.76 | 4.49 | 0.07 | 0.08 | 51.63 | 50.18 | 15.65 | 9.18 |
| Venezuela c/ | 16.05 | 19.56 | 7.57 | 10.02 | 2.13 | 4.76 | 6.98 | 6.91 | 3.86 | 5.80 |

Source: United Nations/DESD, based on Government Finance Statistics Yearbook, 1988 and 1991 (Washington, D.C., IMF).

a/ 1989.

b/ 1987.

c/ 1986.

d/ 1988.

e/ 1990.

five other countries. In nine Latin American countries (Argentina, Bolivia, Brazil, Chile, Costa Rica, the Dominican Republic, El Salvador, Jamaica and Venezuela), the share of government expenditure on social security, unlike that on health and education, grew both in the aggregate and in real per capita terms. 11/

In sub-Saharan Africa, the allocation of health and education expenditures continues to be biased in favour of secondary and tertiary services, mostly utilized by better-off households, which are politically the more powerful groups in the population. 12/ When scaling down social service programmes, quite often expenditure benefiting strong political constituencies survived.

The fall in public sector expenditure on social services came notwithstanding demographic factors that increased the need for these services. Young people (less than 15 years of age) in the population of some countries continued to increase, putting additional demands on resources for education. The ratio of children under 15 years of age to the working-age population (aged 15 to 64 years) increased from 85.8 per cent in 1980 to 86.7 per cent in 1990 in Africa, while in the same period, it declined from 64.9 per cent to 52.9 per cent in Asia and from 69.7 per cent to 60.4 per cent in Latin America. 13/ At the same time, the ageing of these populations created additional demands for expenditure on health care and social security. During the period 1981-1990, the ratio of those over 65 years of age to the working-age population stayed at 5.8 per cent in Africa and increased from 7.6 per cent to 8.0 per cent in Asia and from 7.7 per cent to 8.1 per cent in Latin America.

Reductions in debt burdens and in defence spending can release public sector resources for social services. The control of inflation world wide and reductions in interest rates in international capital markets as well as domestically should enable developing countries to permit such reallocation. Reductions in military expenditure would permit similar salutary changes. Reform of existing programmes, including better management, can contribute to both improved coverage and more efficient delivery. Providing social services more equitably should be an important objective in such reform.

### 2. Developed market economy countries

In developed market economy countries, social security and welfare payments dominate the pattern of expenditure on social services (see table VIII.5). The proportion of expenditure on social security and welfare in total central government in 1990/91 ranged from 52 per cent in Luxembourg and Sweden to 18 per cent in Iceland. During the decade, the proportion increased in all countries, except Denmark, Spain and the United States of America. The sharp decline in Spain was occasioned by changes in pensions and invalidity benefits and a transfer of these functions to levels of Government other than central. 14/ The decline in the United States is not marked by an increase in the corresponding categories of expenditure by State or municipal Governments, where it fell from 17 per cent in 1981 to 16 per cent in 1989.

Table VIII.5. Expenditure on social services and defence as a percentage of total central government expenditure in developed countries

| | Education | | Health | | Housing and community amenities | | Social security and welfare | | Defence | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 | 1980/81 | 1990/91 |
| Australia a/ | 8.12 | 6.79 | 10.10 | 12.84 | 0.67 | 1.78 | 27.35 | 27.91 | 9.60 | 8.46 |
| Austria a/ | 9.63 | 9.20 | 13.24 | 12.85 | 3.30 | 2.95 | 45.14 | 45.22 | 2.92 | 2.55 |
| Belgium b/ | 14.37 | 12.31 | 1.70 | 1.74 | 1.64 | 2.30 | 41.61 | 42.30 | 5.47 | 4.75 |
| Canada c/ | 3.51 | 2.90 | 6.22 | 5.47 | 2.38 | 1.83 | 31.74 | 35.17 | 7.85 | 7.32 |
| Denmark b/ | 9.96 | 9.34 | 1.44 | 1.10 | 2.08 | 1.36 | 41.21 | 37.40 | 6.25 | 5.39 |
| Finland c/ | 14.46 | 14.40 | 11.19 | 10.79 | 2.75 | 1.91 | 25.98 | 33.19 | 5.14 | 4.65 |
| France b/ | 8.33 | 6.77 | 14.72 | 15.25 | 3.16 | 1.39 | 43.89 | 45.03 | 7.36 | 6.65 |
| Germany b/ | 0.81 | 0.59 | 19.23 | 19.28 | 0.40 | 0.34 | 49.54 | 47.90 | 9.18 | 8.34 |
| Iceland d/ | 12.90 | 13.29 | 21.19 | 24.90 | 2.65 | 2.54 | 15.89 | 18.26 | - | - |
| Ireland c/ | .. | 12.60 | .. | 12.96 | .. | 2.92 | .. | 27.28 | .. | 3.07 |
| Italy b/ | 9.10 | 8.30 | 10.81 | 11.34 | 1.02 | 0.57 | 31.38 | 38.03 | 3.38 | 3.65 |
| Luxembourg c/ | 8.51 | 10.15 | 2.37 | 2.22 | 1.72 | 2.85 | 51.73 | 51.54 | 2.27 | 1.74 |
| Netherlands a/ | 12.47 | 10.83 | 11.72 | 11.69 | 2.93 | 4.05 | 36.99 | 38.23 | 5.59 | 5.03 |
| Norway a/ | 8.52 | 9.42 | 10.28 | 10.43 | 1.79 | 1.26 | 33.51 | 37.96 | 8.71 | 7.97 |
| Portugal d/ | 10.32 | 10.02 | 10.29 | 8.19 | 0.69 | 1.72 | 24.62 | 25.25 | 6.73 | 5.66 |
| Spain b/ | 7.73 | 5.62 | 0.65 | 12.79 | 1.45 | 0.67 | 58.97 | 37.03 | 4.23 | 5.51 |
| Sweden a/ | 10.50 | 8.70 | 1.98 | 0.91 | 3.12 | 4.36 | 46.43 | 51.57 | 7.30 | 6.34 |
| United Kingdom c/ | 2.22 | 3.19 | 13.24 | 14.58 | 2.45 | 3.19 | 28.30 | 31.63 | 13.07 | 12.15 |
| United States a/ | 2.49 | 1.74 | 10.70 | 13.48 | 2.62 | 2.62 | 34.24 | 25.56 | 21.84 | 22.61 |

Source: United Nations/DESD, based on Government Finance Statistics Yearbook, 1988 and 1991 (Washington D.C., IMF).

a/ 1990.

b/ 1988.

c/ 1989.

d/ 1987.

The rate of growth of income transfers in real terms slowed down in the 1980s as compared to the 1970s (see table VIII.6). The slow-down was particularly evident in temporary sickness and maternity benefits and in old-age, permanent sickness and survivors pensions. In real terms, unemployment benefits and temporary sickness and maternity benefits increased insignificantly in the 1980s. In fact, unemployment benefits per capita in real terms declined over the 1980s in all countries, except Austria, Canada, Norway and Sweden (see table VIII.6).

The slower growth in transfer payments is partly the result of a perception that they were too high and provided a disincentive to work. The Netherlands provides an example, unique for its low threshold for entitlement to disability pensions, where disability provided an alternative form of premature retirement. At the beginning of the 1990s, one person in seven in the Netherlands was out of work because of disability, although the general evidence is that health standards improved. In response, in 1991 and 1992, Parliament approved a set of measures, including financial incentives, to discourage sick leave, reduce abuses and speed up the reintegration of the disabled. 15/

Transfer payments on social security continued to grow because, although Governments could tighten the criteria for claiming benefits, the number of people who met the criteria increased. High levels of unemployment in the 1980s, as well as the ageing of the population and the rise in the number of pensioners, increased the number of claimants.

Between 1981 and 1991, out of 19 developed countries, 14 reduced the share of government expenditure on education and 9 on health (see table VIII.5). The proportion of the total population under 15 years of age declined from 35.4 per cent in 1980 to 32.0 per cent in 1990. 16/ Between 1980 and 1988, the proportion of GDP allocated to education decreased from 4.6 to 4.2 per cent in Germany, from 5.9 to 5.3 in Australia, from 7.0 to 6.5 in Canada, from 6.4 to 4.8 in the United States, from 5.5 to 5.0 in the United Kingdom, from 5.9 to 5.0 in Japan and from 9.1 to 7.2 in Sweden. Among the countries that increased their share were Austria (from 5.5 to 6.0), France (from 3.7 to 5.6) and Denmark (from 6.1 to 7.5). 17/ The effects of falling fertility rates on the demand for education services were partly offset by increases in real spending per student. On average, real spending per student (deflated by the public consumption deflator) continued to increase at an annual rate of 1 to 1.5 per cent over the 1980s, compared with an average growth rate of almost 2 per cent between 1975 and 1980. 18/ An increase in the proportion of students continuing higher levels of education was partly responsible for this rise.

The old-age dependency ratio, which heavily influences government expenditure on health services in these countries, continued to rise in the 1980s, at a rate lower than in the 1970s. In addition, many Governments put in place reforms aimed at arresting the upward spiral of health-care costs. Real spending (deflated by the health-care cost indices) per capita of the population covered by public insurance schemes continued to grow by almost 2 per cent a year in the 1980s, a marked slow-down compared to the annual rate of growth of over 5 per cent in the 1970s. 19/ Given the rapidly growing claims on resources, many developed countries tried to find ways of improving the delivery of social services. The Government of New Zealand decided, in

## Table VIII.6. Average annual change in real income transfers per capita of target population in 1970-1979 and 1980-1989 a/

(Percentage)

| | Old age, permanent sickness and survivors benefits | | Unemployment benefits | | Family assistance benefits | | Temporary sickness and maternity benefits | |
|---|---|---|---|---|---|---|---|---|
| | 1970-1979 | 1980-1989 | 1970-1979 | 1980-1989 | 1970-1979 | 1980-1989 | 1970-1979 | 1980-1989 |
| Austria | 4.4 | 3.2 | 5.3 | 2.5 | 8.4 | -0.1 | 0.2 | 0.4 |
| Canada | 5.9 | 3.0 | 3.3 | 2.9 | 5.1 | -0.5 | 5.9 | 4.9 |
| Denmark | 1.8 | 1.9 | -1.8 | -1.1 | 2.2 | 5.8 | 8.4 | 0.0 |
| France b/ | 5.0 c/ | 3.3 d/ | 9.6 c/ | -0.8 d/ | 3.6 c/ | 3.0 d/ | 2.1 c/ | 2.4 d/ |
| Italy | 4.5 | 5.1 | 10.6 | -4.3 | -3.2 | 2.7 | 4.3 | -3.7 |
| Japan | 15.2 | 3.7 | 0.0 | -2.9 | 11.0 | 1.1 | 3.9 | -2.0 |
| Netherlands | 7.0 | -1.2 | -5.3 | -2.3 | 3.1 | -1.6 | 5.5 | -1.6 |
| Norway | 4.3 | 2.0 | 1.4 | 8.1 | -2.1 | 8.6 | 17.2 | 1.9 |
| Sweden | 5.8 | 1.3 | 7.1 | 7.2 | 4.7 | 0.0 | 8.0 | 3.0 |
| Switzerland | 5.6 | 1.2 | 1.8 | -2.0 | 5.9 | 5.2 | 1.5 | 1.5 |
| United Kingdom | 4.1 | 1.8 | -1.1 | -1.4 | 10.5 | 3.4 | -5.7 | -0.9 |
| United States | 3.4 | 0.7 | -1.8 | -1.5 | 3.2 | 0.0 | 2.9 | 3.1 |
| Average | 5.6 | 2.2 | 2.4 | 0.4 | 4.4 | 2.3 | 4.5 | 0.7 |

Source: United Nations/DESD, based on H. Oxley and J. Martin, "Controlling government spending and deficits: trends in the 1980s and prospects for the 1990s", OECD Economic Studies, No. 17 (autumn 1991).

a/ Deflated by the private consumption deflator.

b/ Break in the series in 1981. After 1981 "welfare" is included in the category "other", which is not shown.

c/ 1970 to 1980.

d/ 1981 to 1988.

1990, to increase the use of markets in the delivery of social services, although practical implementation of these reforms proved difficult. Nevertheless, there was considerable decentralization of management decisions in health and education to local government authorities and individuals, maintaining minimum public sector standards. Increased local autonomy and accountability has led to a less complex, more responsive system, with significant budgetary savings. 20/

Other major institutional reforms and adjustments, including new financing arrangements, may be inevitable. 21/ It is likely that there will be less emphasis on State provision of social services and greater participation by family and neighbours, voluntary agencies and the private commercial sector.

### 3. Economies in transition

In the former socialist countries, publicly provided social services were an important part in determining the standard of living. Social services, such as health or professional training, were financed out of the State or enterprise budgets; housing, transport and food were subsidized. Many entitlements to welfare benefits depended on facilities available at the workplace such as government departments, large State enterprises or cooperatives. Employees earned an income irrespective of their output so that there was no need for unemployment benefits. The State assumed overall responsibilities in the social sphere "from the cradle to the grave". However, social services, like all other services in the former centrally planned economies, suffered not only from relative neglect and insufficient funding, but also from long-standing dogmatic bias, which attributed services, in general, to a lower status compared to material production, and a subordinate role in the economy. 22/

Proportions of national expenditure on health services and education were characteristically lower in the centrally planned economies than in the market economies. In Eastern Europe, the average national expenditure on health services and education at the end of the 1980s did not exceed 5 per cent of GDP. 23/ Public health expenditure in Bulgaria and Hungary - two countries for which estimates are available - in the 1980s, was 3.2 and 2.7 per cent of GDP respectively. 24/ This compares unfavourably with the relevant proportions in the OECD countries. The corresponding proportion in the 1980s ranged between 6 and 9 per cent in Western Europe and 11 per cent in the United States. 25/ However, these comparisons are misleading. Relative prices were so highly divergent that without adequate and widespread correction no meaningful comparisons can be made.

The new institutional arrangements for the provision of social services are likely to be very mixed. Government will continue to play the most prominent part for quite some time. 26/ Enterprises and their employees will take on some functions, as is evident already. In a survey of 29 enterprises in Poland, four had raised the proportion of expenditure on social services in total costs, while in others there were decreases ranging from 1.5 to 6.2 per cent. 27/ Small and medium-sized enterprises decreased their social expenditure much more than large enterprises.

The challenges that economies in transition face are formidable: how to raise the quantity and quality of social services amid historic reforms and numerous constraints. Almost all countries have been forced to introduce austerity budgets aimed at containing inflation. These measures seem to have severely reduced allocations for the social sectors. 28/ Revolutionary changes must be expected in institutional arrangements to provide social services.

## B. Some salient features

Targeting social services at certain groups of the population may be considered a retreat from the principle of universality in the access to public services. However, with poverty widespread in many parts of the world, the universality principle is meaningless for millions who lack access to even the most basic services. At a time of austerity and budget constraints, many Governments have been trying to increase the efficiency of social allocations, helping the neediest and balancing budgets at the same time.

Health care and education in many developing countries have been the most obvious choices for change in priorities, although progress to date has been slow and uneven. In most developing countries, secondary education and hospital-based health care receive considerably higher levels of subsidies than primary education and primary health care. Fewer improvements have been achieved in the primary health sector, with the possible exception of the expansion of safe drinking facilities. Although the spread of education, particularly primary and secondary, has been proved to have a significant positive impact on rural incomes, and an even larger effect on non-farm households, fewer resources were committed to this sphere as well. Direct provision of primary health care in rural areas and primary and secondary education have clearly emerged as a priority for State spending.

The distribution of benefits from public expenditure on social services has been an area of major concern. According to some estimates, about 70 to 85 per cent of the developing country total expenditure on health services, both public and private, has been for curative care; between 10 and 20 per cent on preventive care and the remaining 5 to 10 per cent on community services such as mosquito eradication and health education. 29/ In sub-Saharan Africa at the end of the 1980s, only 6.8 per cent of total health spending in Malawi was allocated to preventive services and in the United Republic of Tanzania, 5.9 per cent. In Madagascar, 27.1 per cent of the country's health budget was for primary health care and endemic disease control services; in Ghana and Zambia, most of the health budget went to curative services. 30/ In the countries with private health insurance schemes, over 50 per cent of their budgets have been typically spent on hospital care. 31/ In curative care, more than 80 per cent of the costs have often been absorbed by hospitals and non-essential drugs, while preventive and community services have been poorly tended, although it is well known that the latter group of activities are more effective in improving health conditions.

However, not all this expenditure should be redirected. Hospitals are necessary for the sound functioning of the health-care system. Hospitals constitute an integral part of the referral system; they are the focus of modern medical care, including comprehensive clinical medicine. Since hospitals treat the most difficult cases, inevitably costs per life saved or episode of ill health ameliorated is higher than elsewhere in the system. Allocation problems in the health sector have been rooted in a combination of limited overall resources for health care and the tendency in both government (public) and non-government sectors to allocate what resources there are to high-cost, relatively less productive curative care. 32/

Similar biases in allocating spending in favour of secondary and tertiary education against primary education were evident in some countries. In Brazil, 9 per cent of the public education budget was allocated to secondary education and 23 per cent to higher education; in Chile, Costa Rica, the Dominican Republic and Uruguay, people in the top one fifth of income distribution received more than 50 per cent of the subsidies for higher education, while the poorest one fifth received less than 10 per cent. 33/ In Bangladesh, a disproportionately large amount of these investments was for the construction of hospitals and large schools. 34/ In Malawi, Somalia and the United Republic of Tanzania, the share of public expenditure on primary education declined in recent years, with a concurrent increase in funding for tertiary education. In contrast, a number of African countries, including Madagascar, were able to increase the share of current expenditure on education allocated to primary education, sometimes very substantially.

Given the scarcity of resources, there were many experiments with targeting transfers to the most vulnerable groups. Most food-subsidy schemes worked best in the more developed (largely urban) areas, partly because of a better developed infrastructure and administration. However, in Jamaica, the food-stamp programme was successful in rural areas as well, reaching the poor and vulnerable groups. Its success was attributed, in part, to a well-developed primary health-care system (through which the distribution of food stamps was organized) and a sophisticated social welfare administration. In Egypt, food staples that were primarily consumed by the poor were subsidized. In north-eastern Brazil and in the Philippines, distribution outlets were located in poor neighbourhoods and in rural areas. 35/ In Chile, where public social expenditure fell during the fiscal retrenchment, the Government increased expenditure on specific programmes such as food distribution to pregnant women and to children under six, and implemented special breakfast programmes for children in the government primary schools; food was also distributed at health centres, facilitating the fight against malnutrition in the whole family. 36/ Similar programmes existed in Indonesia and Sri Lanka, where a midday meal at school improved consumption levels and provided support to low-income households through income-in-kind. 37/

In Bangladesh, food subsidies under the Vulnerable Group Development Programme were targeted at rural destitute women and female-headed households, and a food-rationing programme, covering about 8 per cent of the extremely poor households in rural areas, was introduced in 1990. 38/ In the Republic of Korea, at the end of the 1980s, about 47.9 per cent of poor households benefited from the education subsidy programme. 39/

The replacement of expensive general food subsidies by targeted support of only the needy or vulnerable groups proved to be politically difficult not only in the developing countries but also in the economies in transition. With rapidly deteriorating living conditions, limiting subsidies to the most vulnerable groups became essential if fiscal discipline was to be maintained. 40/ The current universal schemes are still widely used as income supplements for households, particularly households with children. Family allowances comprise about a quarter of the total household income in these countries. They cannot be eliminated without some compensatory payments.

One of the most significant trends of the 1980s in both the developed and the developing countries has been the privatization of the delivery of social services. 41/ Privatization is sought to raise efficiency at a time of budget constraints and to raise the quality of services by promoting competition. These reforms have been more thorough in the United Kingdom than anywhere else. The Education Reform Act of 1988, National Health Service reforms, the Housing Act of 1988 and the Housing and Local Government Act of 1989 have laid the foundations for a fundamentally different mode of providing social services in that country than heretofore. 42/ When these laws are implemented, the Government will cease to be a monopolistic provider of these services. In most instances, the Government will pay for these services. They will be delivered by a larger number of enterprises, some in the public sector and most in the private sector. In funding these services, the Government will not often act as a monopsonistic purchaser but potential users will be provided with earmarked budgets or vouchers with which to demand the services from competing providers. It is too early to assess whether these new arrangements will improve efficiency in the use of resources, bring down costs to users and the Government and raise the quality of services.

## Notes

1/ It is claimed that, in Africa, enrolment rates in elementary education declined during the 1980s in 60 per cent of the countries undergoing adjustment (see Giovanni Andrea Cornia, Is Adjustment Conducive to Long-Term Development? The Case of Africa in the 1980s, Innocenti Occasional Papers, No. 21 (Florence, Italy, UNICEF/ICDC, 1991), p. 23).

2/ See, for instance, V. Tanzi, "Fiscal policy and economic reconstruction in Latin America", World Development, vol. 20, No. 5 (London, 1992), p. 645.

3/ Beth Ebel, Patterns of Government Expenditure in Developing Countries during the 1980s: The Impact on Social Services, Innocenti Occasional Papers, No. 18 (Florence, Italy, UNICEF/ICDC, 1991), p. 27.

4/ V. Tanzi, loc. cit., p. 652.

5/ Calculations based on World Economic Survey, 1992 (United Nations publication, Sales No. E.92.II.C.1 and corrigenda), table A36.

6/ David E. Sahn, "Public expenditures in sub-Saharan Africa during a period of economic reforms", World Development, vol. 20, No. 5 (London, 1992), p. 675.

7/ Margaret E. Grosh, Social Spending in Latin America: The Story of the 1980s, World Bank Discussion Paper, No. 106 (Washington, D.C., 1990), pp. 12-14.

## Notes (continued)

8/ David E. Sahn, loc. cit., p. 678.

9/ See Beth Ebel, op. cit., p. 33.

10/ See, for instance, Judith Marshall, "Structural adjustment and social policy in Mozambique", Review of African Political Economy, No. 47 (London, spring 1990), p. 34.

11/ Margaret E. Grosh, op. cit., pp. 13-14.

12/ David E. Sahn, loc. cit., p. 688.

13/ World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4), table 46.

14/ OECD Economic Surveys, Spain, 1988-1989 (Paris, 1989), pp. 48-56.

15/ OECD Economic Surveys, Netherlands, 1990-1991 (Paris, 1991), p. 69.

16/ See World Population Prospects 1990 ..., table 46.

17/ OECD, Educational Trends in the 1970s (Paris, 1984), p. 142; Education in OECD Countries 1987-1988, a compendium of statistical information (Paris, 1990), p. 115.

18/ H. Oxley and J. Martin, "Controlling government spending and deficits: trends in the 1980s and prospects for the 1990s", OECD Economic Studies, No. 17 (autumn 1991), p. 169.

19/ Oxley and Martin, loc. cit., pp. 169 and 172.

20/ OECD Economic Surveys, New Zealand, 1990-1991 (Paris, 1991), p. 74.

21/ B. Munday, ed., The Crisis in Welfare: An International Perspective on Social Services and Social Work (London, Harvester Wheatsheaf/St. Martin's Press, 1989), pp. 14-15.

22/ Ivan Major, "Private and public infrastructure in Eastern Europe", Oxford Review of Economic Policy, vol. 7, No. 4 (1991), pp. 76-78; OECD, Services in Central and Eastern European Countries (Paris, 1991).

23/ Julian Schweitzer, "Transition in Eastern Europe - the social dimension", Finance and Development, vol. 27 (Washington, D.C., December 1990), p. 7.

24/ ILO and World Bank data cited in M. Cichon, "Health sector reforms in Central and Eastern Europe: paradigm reversed?", International Labour Review, vol. 130, No. 3 (1991), p. 315.

25/ "Health-care systems in transition", OECD Social Policy Studies, No. 7 (Paris, 1990), pp. 30 and 108.

## Notes (continued)

26/ E. V. K. FitsGerald, Economic Reform and Citizen Entitlement in Eastern Europe: Some Social Implications of Structural Adjustment in Semi-Industrial Economies, UNRISD Discussion Paper, No. 27 (June 1991), p. 14.

27/ Henryk Zarychta, "Zmiany w polityce socjalnej zakladow pracy w okresie transformacji", Praca i zabezpieczenie spoleczne, nr. 4 (Warszawa, 1992), p. 34.

28/ See, for example, "Polish austerity budget threatens medical care", The New York Times, 24 May 1992; "Medical care in Russia seems near collapse", The New York Times, 9 May 1992.

29/ World Bank, World Development Report, 1990 (Washington, D.C., 1990), p. 77.

30/ World Bank data quoted in D. Sahn, loc. cit.

31/ A. Ron, B. Abel-Smith, G. Tamburi, Health Insurance in Developing Countries: The Social Security Approach (Geneva, ILO, 1990), p. 43.

32/ See Financing Health Services in Developing Countries: An Agenda for Reform, World Bank Policy Studies (Washington, D.C., 1987), p. 25.

33/ World Bank, World Development Report, 1990 ..., p. 79.

34/ M. Hossain and B. Sen, "Rural poverty in Bangladesh: trends and determinants", Asian Development Review, vol. 10, No. 1 (Manila, Asian Development Bank, 1992), p. 25.

35/ See Dominique van de Walle, "Policies for reducing poverty", Finance and Development (Washington, D.C., September 1990), p. 8.

36/ P. Meller, "Adjustment and social costs in Chile during the 1980s", World Development, vol. 19, No. 11 (London, 1991), p. 1559.

37/ S. M. P. Tjondronegoro, I. Soejono and J. Hardjono, "Rural poverty in Indonesia: trends, issues and policies", and G. Gunatilleke and others, "Rural poverty in Sri Lanka: priority issues and policy measures", Asian Development Review, vol. 10, No. 1 (Manila, Asian Development Bank, 1992).

38/ Hossain and Sen, loc. cit., p. 23.

39/ Ki-Whan Chung and Nae-Won Oh, "Rural poverty in the Republic of Korea: trends and policy issues", Asian Development Review, vol. 10, No. 1 (Manila, Asian Development Bank, 1992), p. 113.

40/ See, for instance, Ivan Chernozemski, "Children and the transition to the market economy in Bulgaria: shock therapy with a difference?", in G. A. Cornia and S. Sipos, eds., Children and the Transition to the Market Economy (Aldershot, United Kingdom, Avebury Academic Publishing Group, 1991).

41/ M. Bendick, Jr., "Privatizing the delivery of social services: an idea to be taken seriously", in S. Kamerman and A. Kahn, eds., Privatization and the Welfare State (Princeton, 1989), p. 99.

42/ Julian Le Grand, "Quasi-markets and social policy", Economic Journal, No. 101 (September 1991), pp. 1256-1267.

# Chapter IX

# QUALITY OF LIFE

After reporting on a large variety of indicators of social conditions, it is tempting to essay a summation that constitutes an indicator of the quality of life. However, on reflection one finds that such an objective is far too ambitious for the present state of knowledge.

Although the term quality of life has a certain appeal in suggesting an entity suitable for measurement, it is not at all clear what in this case one would be attempting to measure. The quality of life is determined by a variety of factors, including one's position in relation to others in society. It is therefore best measured through a combination of social and economic indicators and subjective assessments of the relative satisfaction of persons with respect to their conditions of life and their well-being.

The present chapter discusses the existence in most countries of an ambiguous relationship between economic, physical and material betterment, on the one hand, and social progress and satisfaction with respect to the quality of life, on the other. Since many of the indicators for living standards have already been presented in other chapters of the present report, this chapter is concerned mainly with the indicators that reflect growth in prosperity, changes in lifestyle, individual perceptions of happiness, and fraying of the social fabric.

Attempts to build composite indices of the quality of life have gathered momentum in recent years. Work has been done by individual scholars, and by the United Nations Development Programme (UNDP) (discussed below); in addition, the Statistical Commission 1/ and the United Nations Research Institute for Social Development (UNRISD) 2/ have devoted some attention to the question. One of the main conclusions to emerge from their attempts is the imperative need for more accurate and timely data on the traditional measures of economic and social well-being.

The objective dimensions of the quality of life are examined in section A of the present chapter, and social responses to material well-being are discussed in section B.

## A. Objective dimensions of the quality of life

Those elements of the quality of life that are readily measurable by economic and social indicators reflect some of the most important dimensions of human existence. Per capita gross national production (GNP) in particular is a proxy measure of human well-being and social progress at the national level: the higher the income, the higher society's potential capacity to provide improved health care, education and other services. However, as discussed below, per capita income measures have serious flaws when it is a question of assessing the quality of life and need to be complemented by other indicators in order to capture social reality more comprehensively.
Table IX.1 accordingly presents additional indicators - of life expectancy at birth, caloric intake, adult literacy and educational attainment.

Table IX.1. Trends in selected indicators of the quality of life

| Indicators | Low-income countries | Middle-income countries | High-income countries |
|---|---|---|---|
| | | 1989 US dollars | |
| Per capita gross national product (GNP) | 80-580 | 581-5 999 | 6 000-29 880 |
| Life expectancy at birth a/ | | | |
| 1965 | 49 | 58 | 71 |
| 1989 | 62 | 66 | 76 |
| Daily per capita caloric intake a/ | | | |
| 1965 | 1 988 | 2 482 | 3 082 |
| 1988 | 2 331 | 2 834 | 3 398 |
| Average number of years of completed schooling per worker, around 1980 a/ | 1.8 | 4.8 | 9.6 |
| | | Percentage | |
| Adult literacy a/ | | | |
| 1960 | 26 | 49 | 98 |
| 1985 | 56 | 75 | 99 |
| Average annual GNP growth rate, in real terms, 1965-89 a/ | 2.9 | 2.3 | 2.4 |

Source: Department of Economic and Social Development of the United Nations Secretariat, based on World Bank, Development Report, various years; World Bank, Social Indicators of Development, 1990 (Baltimore, Maryland, Johns Hopkins University Press, 1991); World Health Organization (WHO), World Health Statistics Annual, various years; and United Nations Educational, Scientific and Cultural Organization (UNESCO), Compendium of Statistics on Illiteracy, 1988.

a/ Weighted average of countries.

As an indicator of human welfare, life expectancy at birth is important, as it sums up the combined effects of nutritional status, public health, the general physical environment, and the circumstances in which people are born, live and die. Literacy and educational attainments have a favourable impact on the quality of life by enlarging human choice and participation in material and social progress. Nutritional status data are also included in the table in view of the importance to general well-being of adequate food and a proper diet.

The social indicators utilized in table IX.1 also reflect the distribution of social progress among population groups. An improvement in longevity, caloric consumption and literacy means that at least the proportion of people sharing such benefits has risen, even if the improvement does not explicitly identify how the benefits it reflects are distributed among specific segments of the population. With regard, for instance, to improvement in life expectancy and caloric consumption, it can be assumed - in view of the natural biophysical ceiling already (nearly) attained by their indicators among the well-to-do - that the greater benefit accrues to the poor.

As may be seen in table IX.1, improvements in social conditions and living standards are strongly and positively correlated with economic growth. These improvements have proceeded at rates that, historically speaking, are high compared with those of the industrialized countries at comparable stages in their development. However, the progress rates in table IX.1 show a tendency to decline and eventually level off as incomes increase. There are finite limits, for instance, to life expectancy and caloric intake which make it increasingly unlikely that their indicators will continue to reflect a rising trend, and in the case of caloric intake such a trend would be undesirable. 3/

As literacy has become nearly universal in the developed countries, other social betterment objectives, including improved universal education, have assumed a higher priority in recent years. That is one reason why average number of years of completed schooling was included in table IX.1; the other reason was that each year of education beyond the literacy level could be presumed to have a favourable impact on the enlargement of people's capabilities, choices, participation and life opportunities in modern society.

Individual indicators provide useful measures of improvements that have occurred for various dimensions of well-being; however, the design of composite indicators that provide an overall measure of the quality of life involves greater difficulty. All efforts to this end have met with thorny conceptual and theoretical problems of coherence and causality. In all cases arbitrary assumptions have had to be made in the selecting of weights for combining and aggregating the respective indicators within one quality-of-life index. 4/ The underlying arbitrariness of quality-of-life indices reduces their credibility as objective measures for the classifying and ranking of countries according to welfare criteria.

Additional conceptual problems (besides the methodological ones of integrating, calibrating and summing composite indicators) have hindered efforts at developing indices of political freedom and civil rights. 5/ That human freedom has an ultimate worth of profound importance to one's personal life and positive self-identity has long been noted in history. 6/ The concept of human freedom, however, is too culture-specific to be captured in any general measure. There are complex questions of participation and control in many societies that are not necessarily exhausted by an approach to addressing those questions based on the presence or absence of a particular set of political arrangements. 7/ Moreover, while there may be a positive correlation between increased freedom, as conventionally defined, and economic growth, the direction of movement from cause to effect is not clear. 8/

There are good arguments for relying on a single indicator, per capita income, rather than seeking to develop better quality-of-life indices. Indeed, country classifications and rankings obtained through the use of quality-of-life indices differ little from the results achieved with per capita GNP data alone. This is especially true when per capita GNP data are adjusted in accordance with the Kravis purchasing power parity indices for each country and transformed into logarithms, so as to give less weight to improvements in spending power at higher levels of income and thus capture the notion of diminishing marginal utility of income. (This means that the "happiness" derived from an additional dollar of income is greater at lower than at higher levels of income.) 9/ However, unlike composite index approaches, per capita income indicators have the disadvantage of not identifying outlier cases where social progress is either above or below the normal levels attained in other countries for comparable per capita incomes.

Social indicators also have limitations: they fail to shed light on the less readily measurable elements connected with social well-being, such as people's fears, sufferings, conditioned wants, and satisfaction with life. With respect to personal suffering and societal injustice, for instance, social indicators can attest to Governments' enactment of legal measures abolishing bondage, caste systems, racism, and ethnic, religious and other forms of discrimination, but more subtle forms of inquiry would be necessary to determine if and to what extent there persisted a legacy of lingering stigma. Similarly, although social statistics might show that rural households in a given area lived in rudimentary shelter, lacked piped water and latrines, and had no access to schools or health clinics, the assumption that such households felt severely deprived or discontented would be unwarranted if in fact food supplies were adequate, living conditions were not associated with high levels of debilitating diseases, local life did not require literacy, and community and family relations provided reasonable levels of happiness and satisfaction. Furthermore, although indicators derived from surveys of the poor often portray that population as extremely deprived, findings of this kind will be incomplete if they do not take note of corresponding behavioural responses, such as the population's resiliency and capacity to adapt to, and to cope with, misfortune and adversity. Thus, social as well as economic indicators can provide no more than partial and incomplete glimpses of the complex and sometimes contradictory realities that determine and shape the quality of life of both individuals and societies.

## B. Social responses to material well-being

All human beings have needs ranging from basic physical ones, for food and shelter, to psychological ones, for love, belongingness, self-actualization, and other aliments of the human spirit and of self-identity. Each of these elements is in its own way critical to a sense of personal well-being; emotional development, for instance, is retarded and the risk of developing mental disorders is greater in cases where persons are socially isolated and lonely. What may be surprising, however, is the extent to which objective improvements in life opportunities, as measured by indicators of purchasing power, health, and education, are not matched by corresponding increases in level of psychological satisfaction and sense of well-being. As can be observed in table IX.2, the difference between how the poor and the economically well-off rate their quality of life is not as great as the difference in their income levels.

Table IX.2. Level of personal happiness among lower- and higher-income groups in 12 countries, *circa* 1960 a/

| Country | Happiness rating b/ | | Per capita gross national product, 1989 dollars c/ | Size of national sample |
|---|---|---|---|---|
| | Lower-income group | Higher-income group | | |
| Japan | 4.3 | 5.8 | 23 810 | 972 |
| United States of America | 6.0 | 7.1 | 20 910 | 1 549 |
| Germany | 3.0 | 4.9 | 20 440 | 480 |
| Yugoslavia d/ | 4.3 | 6.0 | 2 920 | 1 523 |
| Brazil | 3.9 | 7.3 | 2 540 | 2 168 |
| Cuba | 6.2 | 6.7 | 2 000 | 992 |
| Poland | 3.7 | 4.9 | 1 790 | 1 464 |
| Panama | 4.3 | 6.0 | 1 760 | 642 |
| Dominican Republic | 1.4 | 4.3 | 790 | 814 |
| Philippines | 4.1 | 6.2 | 710 | 500 |
| India | 3.0 | 4.9 | 340 | 2 366 |
| Nigeria | 4.7 | 5.8 | 250 | 1 200 |

Source: R. Easterlin, "Does economic growth improve the human lot? Some empirical evidence", in Nations and Households in Economic Growth, P. David and M. Reder, eds. (New York, Academic Press, 1974), p. 102, table 5.

a/ Responses concerning people's hopes, fears and general level of happiness were obtained through the use of a self-anchoring striving scale. The scale yielded ratings by each respondent, based on his or her subjective evaluation of level of happiness, on a scale ranging from 0 (worst possible life) to 10 (best possible life).

b/ Ranging from a minimum of 0 to a maximum of 10.

c/ Figures drawn from the World Bank and (for Cuba) from the United Nations Development Programme (UNDP).

d/ Data refers to the Socialist Federal Republic, which was composed of six republics.

Attitudes and tastes are a product of internalized values and social experiences, which vary according to cultural background and expectations. Thus, happiness need not rise with improvements in material and physical well-being. For instance, someone's satisfaction with life is unlikely to increase as a result of material improvements if aspirations rise even more rapidly, as can happen when the incomes of reference groups are fast-growing. In the case of the sampled population groups presented in table IX.2, respondents tended to compare their situation with a reference norm derived from their prior and ongoing social experience. According to the survey, people in higher-income groups were happier, on average, than those in lower income groups, but the association between income and happiness was more ambiguous across individual countries. This suggests, reasonably enough, that people are more influenced by national reference groups than by standards of living in other countries when they assess their own quality of life. What does happiness involve? The respondents overwhelmingly emphasized immediate personal concerns, such as adequacy of income, family matters and health, rather than broader national or social issues such as pollution, political power and the threat of war. 10/

Happiness and other subjective entities are not decisive barometers of quality-of-life-related progress and achievements. However, if large numbers of people become, on balance, unhappy and frustrated with their circumstances and prospects, alienation may grow and lead to various forms of social disruption which in turn can reduce the quality of life of the general population. This appears notably to be the case in most developed market economy countries, where substantial improvements in living standards and material well-being (as presented in table IX.3) have been accompanied by a weakening of the social fabric reflected in the rise in homicide, crime, drug abuse, suicide, divorce and illegitimate births (as shown in table IX.4). These trends call into question the assumption that economic progress invariably induces social progress and that through the combined effects of both forms of progress a better quality of life is achieved.

As seen in table IX.3, incomes since the 1960s have risen in real terms, enabling most households to have, for instance, a motor car and better residential accommodations. Moreover, technological improvements have increased life expectancy, augmented physical comfort, reduced the drudgery of household chores, brought varied forms of leisure-time entertainment into the home and eliminated the most difficult and unpleasant tasks in the workplace. Productivity growth has made it possible for employees to work shorter weeks and enjoy longer vacations. Likewise, the proportion of people's normal life spent in employment has fallen substantially as more years have been spent in formal schooling and improved pension and social security provisions have enabled people to retire earlier. 11/ Furthermore, over the course of several decades, social security systems, as discussed in chapter XI, have helped reduce poverty, poor health and insecurity among vulnerable groups. In the past several years, however, the impact of the psychology of plenty appears to have diminished in countries where economic growth has slowed; the appeal of the counter-culture has faded as young people vie for fewer jobs with good career prospects; and parents are expressing concern that the living standards that they grew up with may be beyond the reach of their children when they become adults.

## Table IX.3. Trends in objective well-being in developed countries, 1960s and 1980s

| Country | Real gross domestic product (GDP) per person (constant 1980 dollars) | Life expectancy at birth | Population per motor car | Population per television | Population per telephone | Number of persons per dwelling room | Hours worked yearly per worker (1960s=100) | Social security share of GDP | Proportion of relevant age group enrolled in tertiary-level education |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | (percentage) | |
| Belgium | | | | | | | | | |
| 1960s | 5 762 | 71 | 4 | 6 | 4 | 0.6 | 100 | 11 | 15 |
| 1980s | 11 975 | 74 | 3 | 3 | 2 | 0.5 | 73 | 10 | 33 |
| Canada | | | | | | | | | |
| 1960s | 5 754 | 71 | 3 | 3 | 2 | 0.7 | 100 | 5 | 26 |
| 1980s | 10 995 | 76 | 2 | 2 | 1 | 0.5 | 86 | 11 | 62 |
| Finland | | | | | | | | | |
| 1960s | 5 187 | 69 | 5 | 6 | 3 | 1.3 | 100 | 5 | 11 |
| 1980s | 10 811 | 74 | 3 | 3 | 2 | .. | 89 | 13 | 40 |
| France | | | | | | | | | |
| 1960s | 6 123 | 71 | 3 | 7 | 4 | 0.9 | 100 | 9 | 18 |
| 1980s | 12 352 | 75 | 3 | 3 | 2 | 0.8 | 87 | 19 | 35 |
| Germany | | | | | | | | | |
| 1960s | 7 132 | 70 | 3 | 6 | 3 | 0.7 | 100 | 11 | 11 |
| 1980s | 13 240 | 74 | 2 | 3 | 2 | 0.6 | 81 | 18 | 32 |
| Italy | | | | | | | | | |
| 1960s | 3 839 | 70 | 4 | 8 | 4 | 1.1 | 100 | 9 | 11 |
| 1980s | 8 037 | 75 | 3 | 4 | 2 | 0.8 | 85 | 22 | 26 |
| Japan | | | | | | | | | |
| 1960s | 2 683 | 69 | 6 | 5 | 3 | 1.0 | 100 | 8 | 13 |
| 1980s | 9 109 | 77 | 4 | 4 | 2 | 0.8 | 86 | 15 | 30 |

Table IX.3 (continued)

| Country | Real gross domestic product (GDP) per person (constant 1980 dollars) | Life expectancy at birth | Population per motor car | Population per television | Population per telephone | Number of persons per dwelling room | Hours worked yearly per worker (1960s=100) | Social security share of GDP | Proportion of relevant age group enrolled in tertiary-level education |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | (percentage) | |
| Netherlands | | | | | | | | | |
| 1960s | 6 720 | 73 | 4 | 5 | 3 | 0.8 | 100 | 10 | 17 |
| 1980s | 11 988 | 76 | 3 | 3 | 2 | 0.6 | 73 | 23 | 32 |
| Norway | | | | | | | | | |
| 1960s | 6 471 | 73 | 4 | 5 | 3 | 0.8 | 100 | 16 | 11 |
| 1980s | 14 132 | 76 | 3 | 3 | 2 | 0.7 | 77 | 29 | 35 |
| Sweden | | | | | | | | | |
| 1960s | 8 845 | 74 | 3 | 4 | 2 | 0.8 | 100 | 7 | 13 |
| 1980s | 15 032 | 76 | 3 | 3 | 1 | 0.6 | 79 | 20 | 31 |
| United Kingdom | | | | | | | | | |
| 1960s | 6 399 | 71 | 4 | 4 | 2 | 0.6 | 100 | 14 | 12 |
| 1980s | 9 502 | 74 | 3 | 3 | 1 | 0.6 | 79 | 21 | 23 |
| United States | | | | | | | | | |
| 1960s | 7 433 | 70 | 2 | 3 | 1 | 0.7 | 100 | 3 | 40 |
| 1980s | 11 804 | 75 | 2 | 1 | 1 | 0.5 | 92 | 7 | 60 |

Source: UNESCO, UNESCO Statistical Digest, 1987 (Paris, UNESCO, 1987); Organisation for Economic Cooperation and Development (OECD), Employment Outlook (Paris, September 1983); International Labour Organisation (ILO), World Labour Report (Geneva, ILO, 1984); World Bank, Social Indicators of Development, 1990 (Baltimore, Johns Hopkins University Press, 1991); United Nations Centre for Human Settlements (Habitat), Global Report on Human Settlements, 1986 (New York, Oxford University Press, 1987); World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4); macroeconomic data systems (MEDS) data bank of the Department of Economic and Social Development of the United Nations Secretariat; and other national and international sources.

Table IX.4. Trends in social ills in developed countries

| Country | Homicides | Suicides | Prisoners (per 100,000 persons) | Drug-related crimes | Illegitimate-birth rate | Divorce rate a/ |
|---|---|---|---|---|---|---|
|  |  |  |  |  | (percentage) |  |
| Austria | 1975: 3 | 1987: 28 | 1986: 167 | .. | 1980: 7 | 1985: 3 |
|  | 1986: 2 | .. | .. | .. | .. | .. |
| Belgium | 1975: 1 | 1975: 11 | 1975: 139 | .. | 1975: 3 | 1977: 2 |
|  | 1986: 3 | 1986: 22 | 1986: 149 | .. | 1985: 7 | 1984: 3 |
| Canada | 1975: 3 | 1972: 12 | 1975: 64 | 1975: 244 | 1975: 7 | 1978: 4 |
|  | 1986: 2 | 1986: 15 | 1985: 84 | 1980: 308 | 1986: 12 | 1984: 5 |
| Denmark | 1986: 1 | 1985: 10 | 1985: 37 | 1975: 78 | 1980: 38 | 1985: 4 |
|  | .. | .. | .. | 1980: 94 | .. | .. |
| France | 1975: 1 | 1978: 12 | 1975: 98 | 1975: 7 | 1975: 9 | 1977: 2 |
|  | 1986: 4 | 1986: 23 | 1986: 83 | 1980: 20 | 1982: 14 | 1984: 3 |
| Germany | 1975: 4 | 1976: 9 | 1975: 172 | .. | 1975: 8 | 1980: 3 |
|  | 1986: 4 | 1987: 19 | 1986: 153 | .. | 1985: 13 | 1984: 4 |
| Greece | 1975: 1 | 1986: 4 | 1975: 60 | .. | 1985: 13 | 1984: 1 |
|  | 1986: 2 | .. | 1986: 78 | .. | .. | .. |
| Ireland | 1975: 1 | 1980: 8 | 1975: 47 | 1975: 9 | 1980: 9 | 1980: 1 |
|  | 1980: 1 | 1986: 8 | 1980: 48 | 1980: 28 | 1985: 5 | 1984: 1 |
| Italy | 1975: 3 | 1975: 6 | 1975: 104 | 1975: 6 | 1975: 8 | 1976: 0 |
|  | 1986: 4 | 1985: 8 | 1986: 43 | 1980: 14 | 1986: 13 | 1984: 1 |
| New Zealand | 1975: 1 | 1980: 12 | 1975: 175 | 1975: 94 | 1975: 4 | 1975: 5 |
|  | 1986: 2 | 1986: 13 | 1985: 149 | 1987: 386 | 1985: 4 | 1984: 5 |
| Spain | 1975: 0 | 1976: 4 | 1975: 42 | 1975: 4 | 1975: 6 | 1979: 0 |
|  | 1986: 2 | 1988: 6 | 1988: 80 | 1980: 15 | 1987: 13 | 1985: 1 |
| Sweden | 1985: 2 | 1975: 19 | .. | 1975: 269 | 1977: 35 | 1987: 3 |
|  | .. | 1988: 19 | .. | 1980: 749 | 1989: 52 | .. |
| United Kingdom | 1975: 2 | 1975: 5 | 1975: 102 | .. | 1975: 9 | 1975: 3 |
|  | 1986: 1 | 1987: 8 | 1986: 129 | .. | 1983: 16 | 1984: 5 |
| United States | 1975: 9 | 1975: 11 | 1975: 374 | 1975: 278 | 1975: 11 | 1978: 6 |
|  | 1986: 9 | 1987: 13 | 1986: 381 | 1980: 234 | 1985: 25 | 1984: 8 |

(Source and footnotes on following page)

(Source and footnotes to table IX.4)

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Source: All data are derived from national statistical sources. Data on drug-related crimes are taken from Trends in Crime and Criminal Justice, 1970-1985, in the Context of Socio-economic Change: Results of the Second United Nations Survey of Crime Trends, Operations of Criminal Justice Systems and Crime Prevention Strategies (United Nations publication, Sales No. E.92.IV.3), table 6.

[a] Ratio of divorces in a given year to total population age 25 and over.

As can be seen from table IX.4, in past decades along with material progress there have been growing social problems and a fraying of the social fabric. The growth in imprisonment, homicide and drug abuse shown in the table applies mainly to low-income groups. These are often racial or cultural minorities, for whom drugs are generally associated with escapism, violence with alienation, and crime with, among other things, the economics of supporting a drug habit. As for suicides, the incidence appears likewise to be highest among the urban poor. 12/ Although declining slightly among older people, suicides have risen among the young, particularly those who abuse drugs or are emotionally vulnerable to the pressures of a stressful social, school or workplace environment. 13/ Similarly, the incidence of severe depression has grown substantially, especially among young people, the principal reason postulated being psychological stress associated with the erosion of family cohesion and the waning of religious beliefs that traditionally helped buffer people against life's set-backs. 14/

Generally speaking, secular individualism has helped fuel the increase in sexual freedom and short-term cohabitation outside marriage. 15/ Similarly, the rise in divorce and births out of wedlock partially reflects the diminished role of the family as an institution of economic survival, the growth in the competing choices and opportunities that women in particular face in their lives, and in some cases the perverse effects of well-meaning social and fiscal policies. 16/ However, such a fraying of the social fabric is likely to stabilize and reverse course when social trends attain extreme levels with respect to cultural norms, as has already happened with divorce rates in the Netherlands and the United States of America. 17/

There has been progress as well as retrogression in the social trends of the developed market economy countries. Recent violence perpetrated by the nationalist right against immigrants notwithstanding, tolerance and open-mindedness have generally been growing in those countries as ignorance, prejudice and fixed beliefs wane. The counter-culture movement of the 1960s and 1970s, for instance, raised the consciousness of the general population regarding the perils of environmental degradation, the tragedy of war and the unjust biases that underlie gender inequality. Movements created by groups with grievances have played an essential role in reducing overt discrimination on ethnic, religious, gender-related, sexual preference-related, and other grounds, as reflected by gains achieved by those groups in social and workplace acceptance. The influence of the media and increased access to higher education have helped reduce blind prejudice against and cultural absolutism concerning, among other things, suicide, divorce and births out of wedlock.

Ambiguous trends in living standards and social ills have not been limited to the developed market economy countries. Despite policies of egalitarianism and cradle-to-grave security in the countries of Eastern Europe and the former Union of Soviet Socialist Republics, rates of divorce, alcohol consumption, intentional homicides, and suicides were respectively 7, 22, 29 and 29 percentage points higher in those countries during the 1980s than in the OECD countries. 18/ Such statistics suggest a pattern of alienation, which may have been partly due to frustration over low consumption and living standards that did not improve with time; discontent over the lack of individual freedoms, of a sense of personal responsibility, and of opportunities for better pay; and a cynical attitude towards socialist ideals as access to desired goods, quality services, and various privileges and entitlements became increasingly conditional on Party membership, useful connections and exchange of favours and bribes. 19/

Bearing in mind the diversity of challenges and problems faced by developing countries, and given the limited and generally poor quality of their statistical data on changes in the social fabric, trends reflecting the relationship between material progress and social malaise comparable with those observed in developed countries cannot with certainty be said to have existed in the developing ones. However, the separation of workplace and home, and other factors that have eroded extended-family support structures, have been amply documented, as have the high incidence of lone-parent families and the proliferation of homeless street children in many third world cities. 20/ Generally, cultural patterns that bound individuals into webs of mutual dependency are being frayed as individual-centred interests gradually undermine systems of kinship, ritual and obligation. 21/ Rising levels of homicide (table IX.5) and crime are a problem particularly in large cities, where poverty and insufficient opportunities for gainful work exist in close proximity to the conspicuous consumption and the modern lifestyles that give rise to material aspirations that cannot be realized by people with low incomes. Indeed, in the course of development, crime in the developing countries has shifted increasingly to the lower strata of urban societies, where the impact of assault, theft and property violations has surpassed that in the developed countries. 22/ However, there have been offsetting factors, in particular the all-consuming struggle to overcome adversity and simply survive, which give the third world poor at least a sense of urgency, and a purpose and meaning to life, often lacking among wealthier people and in more prosperous and economically secure societies. Moreover, the goal of upward mobility motivates much of the population of the third world, in particular rural-urban migrants and low-income urban households aspiring to middle-class status, and provides it with a purpose in life.

## Table IX.5. Trends in social ills in developing countries

| | Homicides | Suicides | Prisoners | Divorce rate |
|---|---|---|---|---|
| Country | (per 100,000 persons) | | | (percentage) |
| Argentina | 1985: 4.9 | 1970: 0.1 | 1975: 6.0 | .. |
| | .. | 1985: 6.6 | 1980: 6.0 | .. |
| Brazil | 1983: 6.7 | 1984: 3.3 | .. | 1984: 0.2 |
| | 1984: 14.9 | .. | .. | 1987: 0.2 |
| Chile | 1975: 2.6 | 1975: 5.1 | 1975: 2.0 | 1984: 0.3 |
| | 1986: 3.0 | 1986: 5.3 | 1980: 3.0 | 1985: 0.4 |
| Colombia | 1975: 3.0 | 1981: 3.5 | 1975: 11.0 | .. |
| | 1981: 37.4 | .. | .. | .. |
| Costa Rica | 1976: 0.6 | 1976: 6.1 | 1980: 6.0 | 1976: 0.5 |
| | 1985: 4.0 | 1985: 4.8 | 1986: 3.0 | .. |
| Dominican Republic | 1985: 4.8 | 1985: 2.3 | .. | 1975: 2.0 |
| | .. | .. | .. | 1985: 1.2 |
| Jamaica | 1976: 15.0 | 1976: 3.0 | .. | 1975: 0.3 |
| | 1986: 19.0 | 1987: 13.0 | .. | 1985: 0.4 |
| Korea, Republic of | 1980: 1.1 | .. | 1986: 253.0 | 1977: 0.7 |
| | 1986: 1.3 | .. | .. | 1985: 0.8 |
| Mauritius | 1980: 3.0 | .. | 1975: 7.0 | 1981: 1.1 |
| | .. | .. | 1980: 8.0 | 1986: 0.9 |
| Mexico | 1975: 15.0 | 1975: 1.2 | .. | 1984: 0.4 |
| | 1983: 17.0 | 1983: 1.4 | .. | 1985: 0.3 |
| Sri Lanka | 1975: 7.0 | .. | 1986: 10.0 | .. |
| | 1986: 13.0 | .. | .. | .. |
| Uruguay | 1975: 3.0 | 1984: 7.5 | 1975: 12.0 | 1984: 1.0 |
| | 1986: 2.9 | 1986: 8.8 | 1980: 10.0 | 1986: 1.4 |
| Venezuela | 1975: 7.0 | 1983: 4.8 | 1975: 7.0 | 1985: 1.2 |
| | 1983: 13.0 | 1987: 4.6 | 1980: 5.0 | 1987: 1.3 |

Source: National statistical sources.

## C. Conclusions

There has been substantial progress in living conditions throughout the world in recent decades. Although unequally divided between rich and poor, the improvements in some developing countries have been especially important and rapid. Material well-being has also improved in the industrialized countries. However, as indicated by the findings of polls measuring people's psychological satisfaction and sense of well-being satisfaction with the quality of life has lagged behind objective improvements in living conditions. In addition, there is evidence in many countries of rising levels of crime, drug addiction, suicide and family breakdown, with instances of social malaise especially evident in the countries where general living standards are high. This paradoxical combination of material progress and social deterioration conveys the ambiguous nature of the quality of life in many countries.

There is no easy answer to the question why material and social progress so often diverge, but partial explanations may be offered at least for developed market economy countries. For instance, because rapid technological changes in post-industrial societies involved a need for employable work skills and attitudes, those changes have contributed to the disaffection of the elements of the labour force who, though lacking such skills and attitudes, have consumption wants that the economic system promotes but the social welfare system does not satisfy.

Among the economically better-off, the trend towards increased security, affluence and social tolerance has provided more life options, which may erode the willingness of individuals to put up with the frustrations encountered in work and family situations. 23/ Women have been fragmented by the conflicting demands of career and home. A loss of deeper values can be partly attributed to consumerism, alienation, drugs and the decline of both traditional institutions and a distinct social culture.

It is also important to note that there are needs of the human spirit and the self, for love and a sense of accomplishment, for example, that no amount of economic growth and technological progress can satisfy. Finally, changes in human nature can take a long time, and they sometimes branch off in misguided directions before eventually constituting adaptations to changes in the economy and technology.

To focus too much on signs of social malaise, however, is to risk losing sight of what matters most: the huge disparity in physical and material well-being that continues to exist between the poor and the well-off of the world. There can be no doubt that a person who is a member of a dominant class and financially well-off has opportunities, powers, privileges and a source of solace in a stressful world that a poor person lacks. The grievances of people who have satisfied all of their objective needs seem trifling to people who do not have enough to eat. To equate, within the hierarchy of human needs, the whines of materially well-off with the anguished cries of the poor is to trivialize the importance of what is basic and in urgent need of attention.

In the long run, the subjective aspects of the quality of life may play an important positive role in facilitating social change and human development. Dissatisfaction with present conditions can turn into a catalyst or critical impulse for social progress. Although the safeguarding of freedom and human rights should not be a pretext for tolerating clearly negative, antisocial behaviour, collective human growth and adaptation to change are more likely to occur if diverse values and approaches to life are pursued, even if for a time that process includes divisive and in some instances regressive social trends. Psychological costs will be incurred as people struggle to accommodate contradictory normative systems within their lives, but an adaptive process that leads to a new synthesis of social values holds better prospects in the long term of personal growth and an improved quality of life than defensive postures aimed merely at maintaining the status quo ante in a rapidly changing world.

## Notes

1/ See document E/CN.3/1993/16, entitled "Patterns of consumption and qualitative aspects of development: report of the United Nations Research Institute for Social Development".

2/ Donald McGranahan, Wolf Scott and Claude Richard, "Qualitative indicators of development", United Nations Research Institute for Social Development (UNRISD) Discussion Paper No. 15 (Geneva, 1990).

3/ A simple index has been proposed to capture the fact that as longevity grows, it becomes more difficult to increase life expectancy. The index consists in the ratio of the increase in life expectancy to the shortfall of the base-year from some target figure, say 80 years. Applying the ratio to table 1, for example, one obtains an improvement in the figure for life expectancy at birth of 0.42 for low-income countries, 0.36 for middle-income countries, and 0.55 for high-income countries. For details, see A. Sen, "Public action and the quality of life in developing countries", Oxford Bulletin of Economics and Statistics, vol. 43, No. 4 (1981), pp. 287-319.

4/ Of the numerous efforts at developing comprehensive indices of the quality of life across countries, some have been characterized by high levels of complexity and ambition. For instance, in D. Slottje, G. Scully, J. Hirschberg and K. Hayes, Measuring the Quality of Life Across Countries: A Multidimensional Analysis (Boulder, Colorado, Westview Press, 1991), a large number of measures were selected; weights were alternatively determined by rank of attributes, principal components of attributes and hedonic representation of the attributes. Sensitivity analysis of the different weighing specifications was then used to calculate relative rankings for each index; the average rank for each country was calculated over all the different indices; and the various indices were ranked to obtain the final index of the quality of life. See A. Sen, The Standard of Living (Cambridge, Cambridge University Press, 1987). Quality-of-life indices need to capture differing dimensions of happiness, utility (satisfying of desires), choice, achievement and ability to achieve. However, operationalizing the concept is complicated by the need to obtain consensus on a wide array of objective attributes that yield utility; the difficulty of knowing how individuals or groups weigh the attributes of quality of life from which they derive utility; problems of identifying and measuring the environment in which people live and its importance to the utility they derive from the physical dimensions of the quality of life; and the lack of objective weights for combining various freedom-of-choice properties.

Most quality-of-life and related indices have been simpler and have focused primarily on statistical data including estimates of life expectancy at birth, adult literacy and real per capita GDP. Based on a range of values for each of the composite indicators, a deprivation index for each country has typically been calculated, in terms of the extent to which that country falls short of a specified maximum value. Originally elaborated in M. Morris, Measuring the Condition of the World's Poor: The Physical Quality of Life Index (Elmsford, New York, Pergamon Press, 1979), the same index has been further refined (see UNDP, Human Development Report (New York, Oxford University Press), 1990, 1991 and 1992 editions). The Human Development Index elaborated in those reports adjusts per capita income in accordance with the Kravis purchasing power parity indices for each country, and converts the figures into logarithms in order to capture the notion of diminishing marginal utility of income. See also P. Dasgupta, "Well-being: foundations, and the extent of its realization in poor countries", World Institute for Development Economics Research (WIDER) Working Paper, No. 80 (Helsinki, September 1989); and A. Kelley, "The Human Development Index: 'handle with care'", Population and Development Review, vol. 17, No. 2 (June 1991), pp. 315-324.

5/ An extended discussion with illustrations of the application of a political freedom index can be found in UNDP, Human Development Report, 1992 (New York, Oxford University Press, 1992), chap. 2. The general conclusion reached is that personal security, rule of law and political participation are lacking much more in developing than in developed countries, whereas gaps in freedom of expression and in particular equality of opportunity are less pronounced.

6/ For example, see Aristotle, Nicomachean Ethics, J. Thompson, trans. (London, Penguin Books, 1976). For extended discussions of this Aristotelian principle, see J. Rawls, A Theory of Justice (Oxford, Oxford University Press, 1972), p. 414; and B. Williams, Ethics and the Limits of Philosophy (London, Fontana and Collins, 1985), chap. 3.

7/ Indicators for measuring political freedom and civil rights have been elaborated in C. Taylor and D. Jodice, World Handbook of Political and Social Indicators, vol. 1 (New Haven, Yale University Press, 1983), tables 2.1 and 2.2.

8/ For an index correlating improvements in political freedom and human rights with economic and welfare growth, see P. Dasgupta, op. cit.

9/ See A. Kelley, op. cit.

10/ See R. Easterlin, "Does economic growth improve the human lot? Some empirical evidence", in Nations and Households in Economic Growth, P. David and M. Reder, eds. (New York, Academic Press, 1974), p. 102, table 5.

## Notes (continued)

11/ Retirement age dropped by three years, from 62 to 59, and the age of completion of formal education rose from 18 to 20 in the OECD area between 1969 and 1989. See O. Marchand, "Une comparaison internationale des temps de travail", Futurables, Nos. 165-166 (May-June 1992), p. 38.

12/ For an analysis of suicide characteristics among widely varying socio-economic groups, see R. Petrovic, "The diffusion and characteristics of suicides", Yugoslav Survey, vol. XXXII, No. 3 (1991).

13/ See C. Pfeffer, The Suicidal Child (New York, Guilford Press, 1992).

14/ According to the findings of comparable research designs in Edmonton, Canada; Munich; Florence; Paris; Christchurch, New Zealand; and Los Angeles, New Haven, Baltimore, St. Louis and Piedmont County in the United States, between 1960 and 1980, there was a trend of increasing indidence of major depression over time in all sites, with, in all cases, a substantiali increase in the cumulative rates of major depression with each successively younger birth cohort. As major depression is believed to result from a combination of psychological stress and biological vulnerability, the studies concluded that stresses that could trigger such vulnerability had grown over time. Postulates given for why younger generations were at increased risk included stress related to the breakdown of family life, erosion of support structures in the community and waning of beliefs in religion, which have long been emotional buffers against the sense of hopelessness leading to depressive episodes that can result from personal set-backs and failures. See Cross-National Collaborative Group, "The changing rate of major depression: cross-national comparisons", Journal of the American Medical Association, vol. 268, No. 21 (2 December 1992), pp. 3098-3105.

15/ It has been found, based on data from the European Values Studies, that approval of sexual freedom and partnership outside marriage are positively associated with secular individualism. Frequent church attendance, on the other hand, is strongly correlated negatively with cohabitation outside marriage. See R. Lesthaeghe and J. Surkyn, "Cultural dynamics and economic theories of fertility change", Population and Development Review, vol. 14, No. 1 (1988), pp. 1-45; and E. Carlson, "Couples without children: premarital cohabitation in France", in Contemporary Marriage: Comparative Perspectives on a Changing Situation, K, Davis, ed. (New York, Russell Sage Foundation, 1985), pp. 113-130.

In the United States, the rise in premarital intercourse, increases in out-of-wedlock child-bearing and the growing incidence of short-duration cohabitation are viewed as outcomes of the decline of parental authority. See, for instance, R. Rindfuss and A. Vandenheuval, "Cohabitation: a precursor to marriage or an alternative to being single?", Population and Development Review, vol. 16, No. 4 (1990), pp. 703-726; and L. Bumpass, "What's happening to the family?: interactions between demographic and institutional change", Demography, vol. 27. No. 4 (1990), pp. 483-498. More recently, fear of acquired immune deficiency syndrome (AIDS) may also be a factor behind rising trends of cohabitation in large cities of the United States.

## Notes (continued)

16/ In the United States, for instance, the bearing of illegitimate children and the maintaining of lone-parent families are unintentionally encouraged among the poor by welfare measures that reward unemployed single mothers for each additional child. See G. Duncan and W. Rodgers, "Lone-parent families and their economic problems; transitory or persistent?", in OECD, Lone-Parent Families: The Economic Challenge, OECD Social Policy Studies, No. 8 (Paris, 1990). In Sweden, where as of 1985 68 per cent of all unions were consensual and 32 per cent were marital (Statistisk Arsbok '92), vol. 78 (Stockholm, Statistiska centralbyran, 1992), marriage has been discouraged by high progressive tax rates that hurt married couples filing jointly more than persons filing separately. In other respects, cohabitation in Sweden is similar to marriage in the sense that most cohabitating unions are of long duration and include child-bearing and -rearing. See, for instance, B. Hoem, "Early phases of family formation in contemporary Sweden", Stockholm Research Reports in Demography, No. 47 (University of Stockholm, 1988).

17/ Divorce rates in the Netherlands, after rising by 65 per cent between 1975 and 1985, fell by 18 per cent between 1985 and 1989 (the most recent year for which data were available). See Netherlands Central Bureau of Statistics, Statistical Yearbook of the Netherlands, 1991 (The Hague, SDU/Publications, 1991). Divorce rates in the United States, after rising by 127 per cent between 1960 and 1984, declined by 4 per cent between 1984 and 1987 (the most recent year for which data were available). See United States Bureau of the Census, Statistical Abstract of the United States, 111th edition (Washington, D.C., 1991).

18/ During 1985-1987, annual divorce rates as a percentage of the total population age 25 and above were 4.8 in Eastern Europe and the USSR compared with 4.5 in the OECD countries. Per capita adult consumption of spirits (litres) averaged 4.4 annually in Eastern Europe and the USSR and 3.6 per cent in the OECD countries during 1980-1985. Intentional homicides per 100,000 persons during 1987-1988 amounted to 4.9 in Eastern Europe and the USSR and 3.8 in the OECD countries. Suicides per 100,000 persons during 1987-1988 totalled 18.8 in Eastern Europe and the USSR and 16.6 in the OECD countries. There were insufficient data on illegitimate births, prisoners and drug crimes in Eastern Europe and the USSR to make comparisons with the OECD countries. See also UNDP, Human Development Report, 1991 (New York, Oxford University Press, 1991), p. 176, table 28.

19/ See W. Brus and K. Laski, From Marx to the Market: Socialism in Search of an Economic System (Oxford, Clarendon Press, 1989), pp. 10-11 and 36-37; J. Kornai, Contradictions and Dilemmas (Budapest, Corvina and MIT Press, 1985), pp. 125-138; M. Matthews, Privilege in the Soviet Union (London, Allen and Unwin, 1978); and E. Makrzycki, "The legacy of real socialism and Western democracy", Studies in Comparative Communism, vol. XXIV, No. 2 (June 1991), pp. 212-213.

20/ See document A/46/454, entitled "International cooperation for the eradication of poverty in developing countries".

21/ For instance, the convention of arranged marriages is yielding in many developing countries to a trend towards more marriages based on romantic love. This is lamented by elders for undermining old, traditional bonds of loyalties, obligations and social stability. Two factors contributing to that trend have been an older first-marriage age and, in some countries, exposure to television soap operas and foreign movies. See W. Jankowiak and E. Fisher, "A cross-cultural perspective on romantic love", Ethnology, vol. XXXI, No. 2 (April 1992), pp. 149-155.

22/ See Centre for Social Development and Humanitarian Affairs, Trends in Crime and Criminal Justice, 1970-1985, in the Context of Socio-economic Change: Results of the Second United Nations Survey of Crime Trends, Operations of Criminal Justice Systems and Crime Prevention Strategies (United Nations publication, Sales No. E.92.IV.3), pp. 49-56.

23/ This point was brilliantly discussed by D. Riesman in his foreword to the sixth edition of D. Riesman, N. Glazer and R. Denney, The Lonely Crowd (New Haven, Yale University Press, 1963).

# Part two

# MAJOR ISSUES AND DILEMMAS

## Chapter X

## MAJOR CHANGES IN ECONOMIC AND SOCIAL INSTITUTIONS

In a manner unforeseen even a few years ago, major economic and social institutions throughout the world are being called into question. In Eastern Europe and the successor republics of the Soviet Union, some of the most fundamental institutions of society are undergoing change. In developing countries, policy reforms include the transformation of both economic and political institutions. In market economy countries, increasing attention has been directed to the role of economic institutions in technological progress and to mechanisms for maintaining international competitiveness. Everywhere, there has been a sharp retreat from governmental control and regulation of economic activity, even though it is well understood that no market economy can exist without a public sector. The most fundamental of institutions, the family, has begun to take new forms. Non-governmental organizations have gained far more prominence than ever before. International organizations have come up against new challenges, to which the international community has been slow in responding.

The most dramatic changes are taking place in the economies in transition. Fundamental economic and social institutions are being redesigned. The State is being divested of the means of production. Laws have been enacted to establish private ownership and are being implemented. Entire mechanisms for providing social security are being newly designed. Totalitarian Governments are having to limit their spheres of activity and intervention in the life of individuals and in associations of individuals. Centrally planned economies are being transformed into market driven economies.

Limiting the economic role of the State is a feature common to all economies. In developing countries, this has implied reducing ownership of enterprises, removing administered prices and liberalizing international trade. In developed countries, while there has been some selling of State-owned enterprises, the most striking feature has been deregulation. In all economies, there has been a shift towards using policy instruments which work through the market, and Governments are contracting out activities which they finance.

The way governments are formed and the manner in which their business is conducted have also been changed. Periodic popular elections of the legislature and the head of the executive branch have replaced military rule and single-party governments in several countries. Powers of government have been separated, especially with a view to establishing a judiciary independent of the executive and the legislature. There have been strong demands for greater transparency in the functioning of government.

The emergence of the market in the economy has made the function of entrepreneurship all the more important.

These dramatic changes in institutions have been preceded by academic inquiries over a long period of time into the nature and significance of institutions in the economic and social development of societies. 1/ They have been identified as "sets of rights and obligations affecting people in their economic lives". 2/ Property rights are perhaps the clearest case here. There are numerous ways in which property can be held, determining among other things the distribution of its yield. The most active concerns are with alternatives to the State ownership of property and their consequences for economic and social development, as well as for civic society.

Alternative institutional arrangements, for example, through legally enforceable contracts, may also reduce uncertainty and provide greater flexibility in the allocation of resources, and a functioning financial market encourages a more efficient allocation of resources. As an economy becomes more complex because of the division of labour, innovations and improvements in institutions become necessary to reduce transaction costs among the myriad agents in the economy. Institutional innovations thus become an instrument for reducing transaction costs, much the same way as advances in technology help reduce transformation costs.

This chapter is limited to a consideration of issues connected with the role of government in the economy. The extremely important changes in international institutions during the past six years and the emergence of non-governmental organizations are not dealt with.

## A. Government and the economy

For either ideological or pragmatic reasons, the role of government increased in virtually all economies during the twentieth century, especially in the developed market economy countries (see table X.1). As the decade of the 1980s progressed, claims for limiting the role of government vastly increased. In developed market economies, the major macroeconomic policy preoccupation became one of controlling inflation rather than of combating depression. Income creation by Governments by spending beyond their revenue was seen as a major villain of the piece. Citizens whose marginal rates of taxation had risen substantially, as in Sweden, the United Kingdom and the United States, voted against further increases. In the centrally planned economies, there was, in addition to the political unacceptability of government ownership of all means of production, massive popular dissatisfaction with scarcities, queuing and deterioration of economic and social conditions. 3/ In these economies, the State, which was to have served the public interest by correcting market failures, was found in fact to have let conditions in many instances deteriorate well beyond those in most market economies. 4/ In developing countries, government as the source of inflation-generating money income, especially in Latin America, came to be identified as a main source of economic instability. Stabilization policies generally required that government expenditure be curtailed. Government-owned enterprises, in most instances, made no return on the capital invested and were a permanent drain on government financial resources. Where these enterprises were not open to competition, inefficiency was rampant. With rare exceptions, such as in Brazil, India and Indonesia, government enterprises were not leaders in technological innovation. Regulation of economic activity generally created incentives for acquiring large fortunes out of rentier income rather than productive activity. In addition, the behaviour of economic agents was governed by bureaucrats, whose objectives in relation to those enterprises were very different from those of entrepreneurs. 5/ Most

Table X.1. Government current expenditure on goods and services as a percentage of GNP at current market prices, 1870-1965

| | 1870 | 1913 | 1938 | 1965 | 1960-1989 a/ |
|---|---|---|---|---|---|
| Belgium | .. | .. | .. | 12.8 | 39.5 |
| Canada | 4.6 | 8.1 | 10.9 | 13.8 | 34.1 |
| Denmark | .. | .. | 9.3 | 13.8 | 41.2 |
| France | .. | .. | 13.8 | 13.3 | 39.2 |
| Germany | 5.9 b/ | 8.7 | 23.1 | 15.5 | 37.8 |
| Italy | 8.1 | 9.7 | 15.7 | 14.7 | 34.1 |
| Japan | 6.8 c/ | 9.1 | 25.0 | 9.3 | 19.5 |
| Netherlands | .. | .. | 11.4 | 15.9 | 44.2 |
| Norway | 3.8 | 6.3 | 9.9 | 17.0 | 38.9 |
| Sweden | 4.7 | 5.6 | 10.4 d/ | 19.3 | 45.1 |
| Switzerland | .. | .. | .. | 11.8 | 25.4 |
| United Kingdom | 4.9 | 7.0 | 13.0 | 16.7 | 36.8 |
| United States | 3.7 e/ | 4.2 | 10.1 | 17.4 | 30.5 |

Source: Angus Maddison, Economic Growth in Japan and the USSR (New York, W. W. Norton and Company, Inc., 1969), p. 13, table 5; and OECD Historical Statistics, 1960-1989 (Paris, Organisation for Economic Cooperation and Development, 1991), p. 67, table 6.4.

a/ 1960-1989 average; current disbursement by Governments as a percentage of GDP.

b/ 1871-1890.

c/ 1879.

d/ 1938-1939 average.

e/ 1869-1878 average.

damaging, these controls tended to stifle initiative, eliminate competition and obstruct the flow of ideas conducive to economic development.

In many developing countries, the immediate reason for reducing the size of government was a policy package accepted by Governments in negotiations with the International Monetary Fund and the World Bank on economic reforms.

### 1. Curbs on government expenditure

One of the most salutary effects of disciplining the financial conduct of government has been that in many countries inflation has been brought under control. Consumer price inflation, which had been 7.0 per cent in major industrial countries in 1982, was brought down to 3.2 per cent in 1992.

However, there is fear that massively larger expenditure by the Government of Germany in the process of integrating the economy of the former German Democratic Republic may engender inflationary processes. In developing countries, in general, price inflation in 1991 at 75 per cent was two and a half times that in 1981. Yet, compared with 477 per cent in 1990, that was a dramatic improvement. The improvements between 1990 and 1991 were most marked in Latin America, with a deterioration in Africa and Asia. In deep contrast, price inflation in European centrally planned economies took a markedly upward trend in 1991, except in Poland, where the rate of growth of consumer prices fell from 585 per cent in 1990 to 70 per cent in 1991. 6/ In economies where prices had been stable for a generation or more, the increase was very disturbing to the public.

The longer term social benefits of price stability are numerous, besides the conditions conducive to more rapid economic growth that such stability permits. Since the nature of inflation is that the value of money (and near money assets) falls in terms of other assets, all those who hold money will lose command over resources to others in the economy. The longer money is held, the larger will be the losses. Since the very poor hold little money for short periods and the rich hold only a small proportion of their total assets in money, losses will be incurred by those in the middle. Since the value of the major asset owned by the poor, their labour power, does not rise to compensate for a fall in the purchasing power of money, especially where they are not organized in trade unions, their real earnings will fall in a time of inflation. 7/ Therefore, rising inflation has ominous consequences for maintaining the social fabric in the previously centrally planned economies. Emerging price stability in developing countries portends less inequity and social strife.

### 2. Sale of enterprises

As part of the process of reducing their economic functions, Governments have been divesting themselves of the ownership and management of enterprises. In the economies in transition, the privatization of small units has been highly successful. In Czechoslovakia, over 15,000 small enterprises were auctioned off in 1991; in Poland, about 60,000 small units were leased or sold to the private sector during the period 1990-1991 and 70 per cent of retail trade was in private hands by mid-1992. 8/ Hungary is currently auctioning small enterprises to the public. In Romania, as well as in some of the States of the former Soviet Union, the sale of small enterprises started in 1992. 9/

A quasi-private sector emerged in China as a result of farm reforms and experiments with other changes since 1979. In rural areas, the introduction of a contracting system and family farming, free marketing of farm products and permission to establish small-scale enterprises led to a growth in farmers' income. Township and village enterprises reabsorbed the surplus labour squeezed out from the land. By 1990, "collective enterprises" produced 54 per cent of industrial output while the share of State-owned enterprises declined from 80 per cent in 1979 to 46 per cent in 1990. 10/

Two thirds of the "collective enterprises" are township and village enterprises owned by workers or local governments through holding companies. Personally owned enterprises are still few in number, except in the coastal provinces, where their role is more significant. There, private enterprises have been established jointly with foreign capital.

Selling large enterprises to the private sector has been more problematic. In the economies in transition, legislation has provided a legal basis for the private ownership of enterprises and the employment of labour for profit.

Bulgaria adopted a Law on Privatization in 1992, which established the National Privatization Agency. Under the law, 20 per cent of the shares of all enterprises sold to the private sector must be transferred to a national mutual fund to cover restitution claims and for subsequent distribution to the population at large. A further 20 per cent is reserved for employees who can buy them at 50 per cent of the market price. 11/ Romania prepared 23 State enterprises in a variety of sectors for a pilot privatization programme. In Romania, the establishment of five Private Ownership Funds was approved by parliament in 1992 and they are being set up. Russia started a mass privatization programme on 1 October 1992, when every man, woman and child received a voucher worth 10,000 roubles. The Latvian Law on the Process of State and Municipal Property Privatization put the initial responsibility for privatization proposals in the hands of the sponsoring ministries. The Government of Lithuania selected 100 enterprises for privatization, six of which were offered for sale in the autumn of 1992. 12/

In Poland, the Government preferred rapid and wide-scale privatization. In July 1991, 400 enterprises were chosen for sale to private sources. These enterprises accounted for about 25 per cent of total industrial sales and around 12 per cent of total industrial employment in the country. 13/

In Hungary, several privatization campaigns have resulted in a significant reduction of the share of State assets in the economy and in a much more diversified ownership structure. By September 1991, the share of the State-owned assets in the economy fell below 50 per cent. The share of the private sector was 18.5 per cent, of foreign capital 3.7 per cent, of cooperatives 18.5 per cent and of local authorities 7.4 per cent. 14/ However, the number of new enterprises established declined from 9,226 in the first quarter of 1991 to 6,517 in the first quarter of 1992. 15/

In Czechoslovakia, between the fourth quarter of 1990 and the first quarter of 1992, the number of private firms trebled from 393,220 to 1,205,808, the number of cooperatives grew from 4,196 to 5,938 and the number of mixed-ownership companies increased from 110 to 590.

In Germany, the Treuhandanstalt (a public trust fund for the administration of State property) responsible for privatizing State enterprises in the former German Democratic Republic had sold nearly 9,500 enterprises by October 1992 out of 12,000 assigned to it. 16/

Several factors have stood in the way of rapid privatization in the economies in transition. First, an assets market for enterprises is generally part of a complex and sophisticated set of markets, including those for goods, labour and money. Each of these markets would have its own organizations, such as stock exchanges, money markets and commodity markets. They would all be governed by a set of commercial laws and a system of courts. The markets would determine prices, including interest rates, and therefore the net present value of assets. Laws and legal procedures would provide the means of enforcing contracts. In the absence of a functioning market for labour and social safety nets, it is natural that government, enterprise managers and workers in large enterprises would resist changes in ownership which could deny livelihood to large numbers, and engender political opposition to these changes. There is also the problem of knowledge and familiarity with entrepreneurial activity. In the centrally planned economies in which private entrepreneurship was not totally wiped out and State ownership came after the Second World War there were some remnants of entrepreneurship skills, whereas in the former Soviet Union, after more than two generations of socialist economy, such skills were much rarer.

The changeover to a new economy and society is also hampered by the weight of values and norms espoused and cultivated under communist rule. Although it failed to create a "new man", 17/ the average person absorbed the ideological principles of equality, social security and solidarity, which were heavily emphasized through education and the mass media. Society was expected to provide not simply equality in opportunities but outcomes as well. There was little knowledge of the functioning of markets, except where there was contact with "market socialism".

Higher education was geared to training specialists in industry, in particular heavy industry. Economics education focused mostly on the theory of socialism and skills required within that scheme. The economics curriculum varied considerably among countries. Polish and Hungarian students had better access to knowledge about markets even in the late 1950s and 1960s than did Soviet or Romanian students. The latter's familiarity with markets, competition, banking and exchange rates was abstract and inadequate to operate under real market conditions.

The strength of these habits of mind and values is reflected in findings from recent surveys and opinion polls. Rejection of the social costs of economic reforms is as common as support for markets and capitalism. Although most respondents agreed that incompetent workers should be dismissed and understood that incomes would be unequal, they also expect the State to continue welfare programmes on the same scale as earlier and actively interfere to limit high incomes and reduce differences between the rich and the poor. According to the overwhelming majority of respondents, the State should also continue to provide employment to all those wanting to work. 18/

These inherited attitudes and skills are, in general, more a liability than an asset in the process of transition to market economies in all countries in the region. The attitude towards work, learning and innovating, profit, competition, welfare and social justice are not typical for a market economy.

Workers now as before are primarily concerned with wage increases; their demands are often unrelated to improvements in work efficiency. When part of the Polish company Wedel was recently acquired by Pepsico, most workers believed that the major change in their enterprise under new management would be a rise in wages to a level closer to those in the United States. 19/ Bureaucrats in institutions in some countries which have already replaced the old structures, such as planning commissions or branch ministries in Hungary, still operate within the old schemes. A new class of private businessmen seems to be more interested in arbitrage and marginal trade than in longer term investments and searching for opportunities to innovate. Recent studies of the adaptability of Polish managers to competitive market conditions suggest that many of them, especially those in monopolistic enterprises, continue their passive attitudes of the past with respect to the acquisition of new skills, the search for new clients and markets, the development of new products and cutting costs. 20/ The State is often considered the saviour of failing enterprises. Demands for negotiations with government on plans to save the aircraft industry or inefficient steel mills are cases in point.

Developments in economies in transition so far show that it is indeed a slow and difficult process. 21/ The formal elimination of old laws, regulations and other institutions has not produced a new market system. Nor have new values been widely understood and accepted by workers, farmers, managers of privatized enterprises and bureaucrats.

They will change under the pressure of a new competitive environment, new education curricula and experience. The process will be lengthy and socially painful in all countries of the region. The moral claims of the major social groups that initiated the transition, workers and farmers, cannot be matched by adequate rewards, at least in the short and the medium terms, as the costs of transition tend to occur much earlier than the benefits.

The centrally planned economies of Asia - China, the Lao People's Democratic Republic, Mongolia and Viet Nam - have followed different paths of institutional reform. The functions of the State have remained intact. The former dominant political parties continue to be in power. Large-scale industries remain in the public sector. Agriculture and small-scale enterprises function in the private sector under various institutional arrangements. The exchange rate has been allowed to be determined largely by market forces. There have been attempts at price liberalization. Output has increased at markedly high rates in agriculture and in small-scale industry in China and Viet Nam. Industrial output dependent on imports from the economies in transition in Europe has fallen in Mongolia and Viet Nam, which were members of the Council for Mutual Economic Assistance, because of difficulties both in supply in these economies and of financing after the breakdown of earlier arrangements. Viet Nam began to export rice in 1985 and other exports have grown. Exports from the Lao People's Democratic Republic to Thailand have also grown. Mongolia expects to export livestock soon. These favourable changes have not been accompanied by the kind of institutional changes common in economies in transition in Europe.

There is no one market model to follow and a variety of options exists, ranging from the United States to Japan and to the Republic of Korea. They have gradually evolved their own version of markets and capitalism, depending on their history and culture. The market systems that will evolve in the economies now in transition would differ from all these and carry their own characteristics. Replicating the entire political, legal and economic institutional infrastructure of the United States would not be easy in the economies in transition. The emphasis on equality and solidarity in the former socialist countries points to the need for combining market mechanisms, parliamentary democracy and limited forms of private ownership of the means of production. 22/

More than 50 developing countries are pursuing programmes of privatization. Several have enacted special legislation and established organizations to complement these programmes.

In Ghana, the Divestiture Implementation Committee, created in June 1988, is responsible for the preparatory work on privatization. In Morocco, a Commission for Transfers supervises the implementation of the programme. In Egypt, a Public Sector Company Law was enacted in 1992 to provide legal provisions for the privatization of government-owned enterprises. 23/ In Chile, a special administrative structure established in 1974 was integrated in a public holding company, Corporación de Fomento de la Producción, and made responsible for all transfers of public enterprises to the private sector. 24/

So far, privatization in developing countries has been on a modest scale. The most wide-scale privatization programmes have been in Chile and Mexico. The total number of State-owned enterprises in Mexico fell from 1,155 (majority holding) in 1982 to 132 in January 1992. 25/

In Chile, five large agro-industrial companies, including Industria Azucarera Nacional, were transferred to private enterprises during the period 1985-1989. Sixteen State-owned industrial enterprises, including EMEC, an electricity distribution company, and Empresa Hidroelectrica Pilmaiquen, a hydroelectric complex, were also sold to the private sector. Sixteen financial intermediaries and six transport and telecommunication companies were also privatized. In Jamaica, 44 enterprises have been sold since 1981. 26/ In Brazil, only a few small companies were privatized during the period 1980-1989 and it was planned to sell another 22 in 1992. However, there were violent public protests against the transfer of USIMINAS, the largest steel mill in Latin America, in October 1991, indicating that popular support for privatization was not enthusiastic. Argentina set up a timetable for the privatization of all remaining public sector companies, to be sold in two stages by 1992. Among these enterprises were five water utilities, a post and telegraph enterprise, Encotel, and 10 constituent parts of Gas del Estado. 27/ Ecuador recently announced an ambitious privatization programme. About 20 enterprises, including Ecuadorean Airlines and the electricity and telecommunications enterprises, were to be sold initially.

In Africa, Ghana, Guinea, Côte d'Ivoire, Niger, Nigeria, Senegal, Togo and Uganda have been enthusiastic about the privatization of government enterprises. 28/ From 1980 to 1990, the number of public enterprises in Guinea decreased from 174 to 48, in Côte d'Ivoire from 147 to 82 and in Niger from 47 to 23. 29/ In Guinea and Niger, the privatization programme resulted in a significant reduction in government payments to public enterprises. The share of government payments to public enterprise in total government expenditure declined from 35 per cent in 1980 to 0.7 per cent in 1985 in Guinea and from 11.3 per cent in 1981 to 2.5 per cent in 1988 in Niger. In contrast, in Côte d'Ivoire, the share grew from 6.2 per cent in 1980 to 16.5 per cent in 1985.

India has actively implemented a privatization programme. In 1991, 17 out of 244 central government enterprises were partially divested. In 1992, the Government decided to offer to the public shares in another 20 public companies, including Steel Authority of India, Bharat Petroleum Corporation, Hindustan Petroleum Corporation, Hindustan Zinc, Rashtriya Chemicals and Fertilizers and Hindustan Machine Tools. 30/ The Malaysian Privatization Plan of 1990 identified 147 government entities as privatization candidates. Of these, 37 were due for sale in the following two years, including Petronas Dagangan, a Petronas distribution and retailing subsidiary, and some water distribution companies. Government holdings in Tennga Nasional (electricity utility) was to be reduced to 77 per cent. 31/ In the Philippines, one of the largest State-owned enterprises to be sold to the private sector was Philippine Airlines.

In African countries, as in economies in transition, one of the main impediments to the sale of public assets to the private sector has been the rudimentary nature of securities markets and a lack of potential buyers. In sub-Saharan Africa, there are only five stock exchanges - in Abidjan, Lagos, Nairobi, Harare and the recently opened one in St. Louis, Senegal. One of the major reasons that large-scale enterprises were started by the public sector in the first place was the inability of private sector enterprises to raise capital on the required scale at a reasonable cost. Where capital markets are better developed, as in most of Asia and Latin America, other factors have stood in the way of rapid privatization. One of these is opposition by employers of the threatened enterprises, who reasonably fear that there would be retrenchment or reductions in the privileged conditions of employment they enjoy in State enterprises. In some of these instances, the enterprises have been handed over to private sector managers with ownership resting in government.

Still other public enterprises await financial structuring before being put on the market for sale to the private sector. Enterprises loaded with debt or banks with large non-operating assets wait to be put on a sounder financial footing before their net worth can be properly established and buyers can find them attractive.

### 3. Minimalist government

The development experience of successful developing economies in the twentieth century does not support a minimalist approach by government. In many of these economies, the State was highly interventionist, especially during the early phase of industrialization. For example, Governments in both the Republic of Korea and Taiwan Province of China were highly protective and interventionist. The Republic of Korea intervened in investment allocation through import substitution programmes, credit allocation via the State-controlled banking system and subsidization. It also intervened massively in the acquisition and spread of technology and in attracting foreign direct investment. 32/ Singapore provided similar protection to infant industries.

Public enterprises also played prominent roles. In the Republic of Korea and Taiwan Province of China, the contribution of public enterprises to gross capital formation was substantial. In Taiwan Province of China, the share of public enterprises in industrial production during the period 1953-1962 was about 50 per cent and industrial output grew by 11.7 per cent per annum. Public enterprises accounted for 25 per cent of gross domestic capital formation in the Republic of Korea during the period 1974-1977 and GDP in real terms grew by 13 per cent per annum. 33/

Government participation in technology transfer in both Korea and Taiwan Province of China was functional, intensive and targeted. Governments intervened by providing tax incentives, institutional support, funding and direct guidance. They set up research establishments in selected activities and sponsored relevant research projects. An instructive instance of such intervention in Taiwan Province of China is in the design and production of semiconductors. In 1974, the Government set up the Electronic Research and Service Organization (ERSO) to develop semiconductor design and production. By 1985, United Micro-electronics, a subsidiary of ERSO with private sector participation, was in full production of 256K dynamic random access memory chips, pretty close to the frontiers of technology. 34/ Governments promoted technology transfer by employing high-quality foreign experts, training national personnel both at home and abroad, providing incentives to local firms to develop local technology and to foreign firms to transfer technology to local producers. Where contracts were given for turnkey projects, governments insisted that local engineers participate in all stages of design and engineering. In establishing production facilities under licence, local firms were provided information, guidance and assistance in bargaining. 35/ Governments of the Republic of Korea, Singapore and Taiwan Province of China were assiduous in building organizations to support industrial development and national technology strengths. Governments imposed high-quality standards, training, information collection, technology, diffusion, testing and research support institutes.

These successful efforts need to be contrasted against failures in other countries. Heavy protection of domestic industry and ubiquitous government intervention in the economy in India and the Philippines in Asia, in most of Latin America and in Africa have not been able to raise rates of economic growth and social development in the same way as the economies in East Asia. The development process in Africa has been severely undermined by market imperfections, to correct which Governments have contributed little. Where political power has been exercised by such select groups as the military or urban elites, as in Latin America, or by those with an interest in continuing current policy regimes, it has been difficult for Governments to perform their normal functions competently.

## B. Good governance

These contrasts emphasize the significance of good governance. Good governance ought to satisfy five conditions. First, that government intervention in the market be limited to what it does best. This has implications for the government ownership of enterprises, taxation, deficit financing, regulation and subsidies. However, the responsibility of government for social security, social protection, the reduction of inequality in the distribution of income, the provision of physical and social infrastructure cannot be minimized. These are not functions which the market performs best, although market instruments can be used by government. The less sophisticated markets would make it all the more necessary for Governments to shoulder these responsibilities. The extent to which outcomes are satisfactory will be determined by the competence of government.

The second condition is that Governments are held accountable to the public. The periodic election of the legislature and the chief executive gives the public an opportunity to approve of the policies and conduct of government. For such elections to be meaningful, it is necessary that the public has a choice between alternative political parties, that the public is well informed of alternative policies and that the elections are fair and open. In recent years, the United Nations itself has either conducted or supervised such elections in Angola, El Salvador and Namibia. Eminent persons from outside the country have been invited to attest to the fairness of elections in a few other countries.

An efficient executive is necessary for good governance. Its emergence requires good education, fair means of recruitment and promotion, training, adequate remuneration and the establishment of sound traditions of public service. Deterioration in pay and conditions of service in many countries in Africa has made the retention of highly competent persons very difficult. At lower levels, public sector workers have taken up other activities to eke out their incomes. In several instances, inadequate pay has enticed government employees to obtain illegal compensation from persons who stand to benefit from the decisions made by them. The discretion available to them in highly regulated economies has made it feasible to obtain such gratification. To the extent that training and equipment can improve efficiency in the executive branch, this is an area for technical cooperation activities. Much of the capacity-building activities financed by the United Nations Development Programme has been in this area.

A fourth requirement is an impartial judiciary. This is especially important for the emergence of markets since the enforcement of contracts finally depends on the presumption that the courts will decide cases impartially between parties to conflicts and the rest of the judicial system will enforce these decisions. A judiciary independent of other branches of government is necessary to ensure that individuals can exercise their rights against an executive which might abuse its power and against legislation which may attempt to encroach on them. These assurances depend on the rule of law rather than the arbitrary decisions of the executive or the judiciary itself.

A fifth requirement of good governance is that processes be transparent. A literate and vigilant public would immensely help to ensure that the conduct of government business remains transparent. Government must function in a language which the public understands. The information media should be free to report and comment on government activities and have adequate access to these processes. Open government would also provide opportunities for the public to participate in formulating policies and monitoring their implementation.

Political, administrative and constitutional changes in developing countries in recent years have generally contributed to better governance. In Latin America and the Caribbean, except Haiti, military rule has been replaced by popularly elected Governments. In Asia, there have been parallel changes, except in Myanmar where the military rules, ignoring the results of elections to the legislature in 1990.

In Africa, the process of change is more variegated. Military rule and one-party political systems prevail in several countries. A number of elections to the legislature and of the chief executive were scheduled to be conducted at the end of 1992. In Algeria, Botswana, Namibia, Senegal and Tunisia several political parties compete for power. Several other countries, including Nigeria, are proceeding towards establishing multi-party systems. Even in countries with a single political party, there have been demands for reforms permitting greater political competition, administrative reforms within the existing framework of law and constitutional reforms to check the powers of the party and the State. 36/ Multi-party elections were planned in Kenya at the end of 1992.

The African Charter for Popular Participation in Development and Transformation (Arusha 1990) 37/ recognized that the political context of socio-economic development was characterized, in many instances, by an over-centralization of power and impediments to the effective participation of the overwhelming majority of the people in social, political and economic development.

The extent of political transformation aimed at reducing these shortcomings varies from country to country. In Burkina Faso, Cameroon, the Congo, Kenya, Madagascar, Mali, Mauritania, Sierra Leone and Togo, the process started with increased scope for political competition within the single ruling party. In some countries, restrictions on political activity and on the press were eased and new political publications have emerged. In Madagascar, a law enacted in March 1990 allowed independent political parties and four opposition parties to be formed rapidly. In Zaire, a 20-year-old ban on opposition parties was removed in April 1990. By July 1990, 42 political parties had applied to the high courts for recognition, a deposit fee of US$ 8,800 for registration notwithstanding. In Cape Verde, constitutional reforms ending single-party rule and legalizing opposition parties was a first step towards parliamentary elections in January 1991. 38/

These liberal and democratic forms of government are desirable in themselves in preference to totalitarian and autocratic forms. The massive disaffection of the public in economies in transition from communist party rule is loud testimony of that preference. However, there is no evidence from recent experience that good governance, as discussed above, is necessary for rapid economic growth and social development.

Some of the fastest growing economies in Asia, including China, Indonesia, Japan, the Republic of Korea, Singapore, Taiwan Province of China and Thailand have not been multi-party democracies. In some of them, sustained rapid economic growth has taken place in a strongly coercive political atmosphere. Multi-party democracy is quite new in several of these countries. In some, although there are competing political parties, one party has been in power without interruption for 20-30 years. In some, military rule has gone hand in hand with fast economic growth. In a few, political accountability has been poor and senior politicians have been accused and convicted of corruption. In contrast, the two countries in Asia that have had closer approximations to democratic forms, namely India and Sri Lanka, have not been models of economic growth and development.

In Latin America, periods of recent military rule, as in Brazil and Chile, have also been periods of rapid economic growth. In Chile, the last period of military rule was also one of economic liberalization.

In contrast, the severe restrictions on economic well-being in Africa make tasks of political liberalization much more difficult. As the economic space in which individuals and groups can move becomes restricted, those who stand to lose power and economic privileges are less likely to be willing to share power with others. Economic revival and growth in these countries would contribute immensely to processes of political liberalization.

## C. Conclusions

The change and development of institutions are important not only for the promotion and preservation of human rights but also for economic and social development. Representative forms of government and limits to their authority are essential to the emergence and continuation of good governance. They may have less to do with rapid economic and social development. Where intervention in economic and social life become impediments to good governance, each society has to decide where to draw the line beyond which government may not encroach.

Since all economies are mixed economies, the quality of government intervention is an important consideration. In economies where markets are rudimentary, the development of markets itself is an important function of government. Protection of the environment, construction of physical infrastructure, primary health care and education, the regulation of banking and finance industries, the eradication of poverty and the reduction of inequality in the distribution of income, and the provision of social protection and security are functions of government. The enactment and administration of laws and regulations and the maintenance of peaceful conditions in which entrepreneurship can thrive are primary responsibilities of government. In economies which are technologically backward, Governments need to take the initiative in undertaking research and training.

It is now clearer that in performing these functions, Governments would do well to use market instruments to ensure that as many of them as feasible are subject to competitive forces. It is also necessary that users of these facilities pay for them both to avoid waste and to finance their maintenance and expansion. Where administrative competence is scarce, the use of market instruments would have an added advantage.

The quality of government will depend very much on the competence of its bureaucracy. Proper training, adherence to merit in appointment and promotion and adequate wages are essential to recruit and retain competent personnel. International cooperation has been a significant means of providing training. There is much room for both expanding and improving the quality of such cooperative action.

New insights into the significance of institutions in the economy seek to demonstrate that they govern costs of transactions in the economy while technology governs costs of transformation. The extent and the speed of technology change itself is determined to some degree by institutional arrangements. Economic, political and social institutions bear a much heavier burden of responsibility for human well-being than was previously thought.

## Notes

1/ See, especially, R. C. O. Matthews, "The economies of institutions and the sources of growth", The Economic Journal, vol. 96 (December 1986), pp. 903-918. See also Douglass C. North, Institutions, Institutional Change and Economic Performance (Cambridge, Cambridge University Press, 1990); Oliver E. Williamson, The Economic Institutions of Capitalism (New York, Free Press, 1985); John L. Campbell and others, eds., Governance of the American Economy (Cambridge, Cambridge University Press, 1991).

2/ Matthews, loc. cit., p. 905.

3/ Janos Kornai, Contradictions and Dilemmas: Studies on the Socialist Economy and Society (Budapest, Corina, 1985).

4/ Murray Feshback and Alfred Friendly, Jr., Ecocide in the USSR (New York, Basic Books, 1992).

5/ Anne Krueger, "Impact of government on growth and trade", National Bureau of Economic Research, Working Paper No. 3545, December 1990.

6/ "The world economy in 1992 - An update: note by the Secretary-General" (E/1992/INF/8).

7/ Eliana Cardoso, "Inflation and poverty", National Bureau of Economic Research, Working Paper No. 4006, March 1992.

8/ European Bank for Reconstruction and Development, A Changing Europe, Annual Report 1991 (London, 1992), pp. 42-43.

9/ Privatization International, No. 49 (October 1992), p. 16.

10/ Lue Goguan, Issledovaniya Ekonomicheskoi Reformi Gossudarstvennoi Sobstvennosti v Kitae, Seria Ekonomicheskaya, No. 2 (Moskva, 1990), pp. 115-128; and The Economist, 1 June 1991, p. 18.

11/ Privatization International, No. 49 (October 1992), p. 16.

12/ Ibid., p. 12.

13/ Poland, Ministry of Ownership Changes, Mass Privatization: Proposed Programme (Warsaw, June 1991), p. 4.

14/ "Privatizacios kutatointezet: szonda ipsos", Barometer of Privatization, No. 91/1 (Budapest, October 1991), p. 1.

15/ "Glowny Urzad Statystyczny, Federalni Statisticky Urad, Kozponti Statisztikai Hivatal", Bulletin, No. 1992/2 (Warsaw, June 1992), pp. 20-21, tables 3.1.1 and 1.2.1.

16/ Leslie Colitt, "Optimists repeatedly disappointed", Financial Times, 26 October 1992, p. X.

17/ For a discussion of how these issues were seen in the early days of communism, see Sidney and Beatrice Webb, Soviet Communism: A New Civilization? (New York, Charles Scribner and Sons, 1936), in particular, vol. II, Social Trends in Soviet Communism. For a discussion of later experience, see W. Brus and K. Laski, From Marx to the Market: Socialism in Search of an Economic System (Oxford, Oxford University Press, 1989), pp. 10-11 and 36-37.

18/ According to an opinion poll in Poland, 85 per cent of the respondents believed that incomes should depend on individual qualifications and competence; at the same time, 39 per cent wanted the State to limit the wages of those earning the most and 72 per cent to limit profits of private enterprises; almost 70 per cent of the respondents were of the opinion that the State should be concerned about reducing income differences (see W. Morawski, "Reform models and systemic change in Poland", Studies in Comparative Communism, vol. XXIV, No. 3 (September 1991)).

19/ Joanna Solski, "W Wedlu wierza ze zarobia jak w Ameryce", Polityka, November 1991.

20/ See Janusz M. Dabrowski and others "Polish state enterprises and the properties of performance: stabilization, marketization, privatization", Central School of Planning and Statistics (Warsaw)/Center for International Affairs, Harvard University (mimeo), May 1991, pp. 38-41 and 44. For a more pessimistic view, see, for example, Richard A. Jenner and Joseph Gappa, "Learning under fire: adaptability of Polish managers to competitive market conditions", Journal of World Trade, vol. 25, No. 2 (April 1991).

21/ The slow nature of assimilating new values and attitudes is discussed by David S. Landes in "Why are we so rich and they so poor?", American Economic Association Papers and Proceedings, vol. 80, No. 2 (May 1990), and, in particular, by Amitai Etzioni, who analyses this issue in relation to the former Soviet Union in "How is Russia bearing up?", Challenge, May-June 1992.

22/ Pranab Bardhan and John E. Roemer, "Market socialism: a case for rejuvenation", Journal of Economic Perspectives, vol. 6, No. 3 (summer 1992), pp. 101-116.

23/ The Banker, July 1991, p. 7.

24/ O. Bouin and Ch.-A. Michalet, Rebalancing the Public and Private Sectors: Developing Countries Experience, OECD, Development Centre Studies (Paris, 1991), pp. 235-236.

## Notes (continued)

25/ See The Divestiture Process in Mexico, Secretariat of Finance and Public Credit (Mexico City, Hacienda, 1991).

26/ See Bouin and Michalet, op. cit., p. 177.

27/ Privatization International, No. 49 (October 1992), p. 11.

28/ C. Vuylsteke, Techniques of Privatization of State-Owned Enterprises: Methods and Implementation, vol. 1 (Washington, D.C., World Bank, 1988), pp. 177-180.

29/ United Nations Development Programme/World Bank, African Development Indicators (Washington, D.C., 1992), p. 258, table 10-1.

30/ Privatization International, No. 49 (October 1992), pp. 1 and 25.

31/ Privatization International, No. 42 (March 1992).

32/ Alice H. Amsden, Asia's Next Giant: South Korea and Late Industrialization (Oxford and New York, Oxford University Press, 1989), pp. 12-13.

33/ See R. Short, The Role of Public Enterprises: An International Statistical Comparison - Public Enterprises in Mixed Economies: Some Macroeconomic Aspects, R. Floyd and others, eds. (Washington, D.C., International Monetary Fund, 1984).

34/ For an instructive study, see Robert Wade, Governing the Market: Economic Theory and the Role of Government in East Asian Industrialization (Princeton, Princeton University Press, 1991); see also Erich Weede, "The impact of democracy on economic growth: some evidence from cross-national analysis", Kyklos, vol. 36 (1983), p. 21.

35/ Sanjaya Lall, Explaining Industrial Success in the Developing World: Current Issues in Development Economics, V. N. Balasubramanyam and Sanjaya Lall, eds. (London, Macmillan, forthcoming).

36/ Goran Hyden and Michael Bratton, eds., Governance and Politics in Africa (London, Lynne Rienner, 1992), p. 36.

37/ A/45/427, appendix II, para. 6.

38/ Hyden and Bratton, eds., op. cit.

## Chapter XI

# FINANCIAL CRISIS AND REFORM IN SOCIAL SECURITY

Social security policies and programmes aim to protect citizens from severe deprivation and to eliminate vulnerability, for the most part by transferring incomes from some groups in society to others. 1/

The gains to society from social provisions and the broader programmes of welfare have been immense. They have reduced the extent and severity of poverty, helped redistribute income more evenly, promoted investment in human capital and reduced economic uncertainty. 2/ In most developing countries on the whole, care of and support for the aged, the sick, the unemployed, the poor and children are a family responsibility. 3/ Voluntary organizations, including religious institutions, play significant roles. In the centrally planned economies, those responsibilities were almost wholly borne by the State and State-owned enterprises, and by families to a lesser degree. 4/ In developed market economy countries, families and relations, voluntary organizations and the State all play significant roles, the most prominent being played by the State. 5/

Social security policies have faced severe challenges in all countries over the past decade - most dramatically in the former centrally planned economies now in transition, less dramatically but none the less highly visibly in developed market economy countries, and also in those developing countries whose economies have deteriorated.

In the former centrally planned economies, the transition to market economies will destroy the "iron bowl of rice", which reduced insecurity. There will be unemployment, both between jobs and cyclical, requiring mechanisms to maintain incomes. New provisions will have to be made for pensions to the retired and to support children from poor families. The poor and the disabled will need support. In the absence of voluntary organizations and any worthwhile assets in private hands which could be liquidated in situations of hardship, the breakdown of State provision will mean severe hardship for many during the period of transition.

In developed market economies, persistently high unemployment (see chap. VI), especially long-term unemployment, has eroded the assumptions that unemployment would be temporary and that the unemployed would not make permanent claims on funds. The ageing of populations and the rising costs of medical care have made for alarming increases in the transfers to the older generations. The growth of single-parent families, of the homeless and of those unable to earn a living has increased burdens on welfare budgets. The design of policies of public assistance has been questioned, because the policies seem to create disincentives to work and raise deadweight costs to the economy. 6/ Where programmes are financed through the government budget, there has been a pronounced reluctance to pay higher taxes.

In developing countries, formal social security benefits are available only to a small section of the population, except in Latin America. As families become smaller and populations age, two income earners may have to support and care for four parents for long periods of time. Urbanization and the separation between the home and the work place make earlier ways of looking after aged parents impracticable. Ageing increases the burden on the working generations to provide for the welfare of the old. The general squeeze on government finances reduces the capacity of governments to provide social security. Fiscal constraints have prompted new efforts to target social security to prevent abuses and to ensure that benefits go to those who need them most. But successful targeting calls for administrative capacities which are scarce in developing countries. 7/

This chapter examines the current crisis in social security in all countries and responses to it.

## A. Developed market economy countries

In the developed market economy countries, public spending for social security has grown rapidly (see table XI.1). Social security expenditure, which in 1960 was 3-12 per cent of GDP, rose to 7-23 per cent by the late 1970s. Then, growth slowed, as Governments tried to restrain budget deficits and also curb tax burdens. None the less, as shown in table XI.1, social security payments remain a major item in public expenditure.

The proportions of expenditure on pensioners, health and unemployment benefits vary, although the bulk is for pensions and health care. In total public expenditure on social services, an average of 35 per cent is allocated to pensions and 7 per cent to unemployment compensation. 8/ In some countries, the number of persons who benefit at any one time from these transfers can be as high as a third of the total population. 9/ Together with social welfare programmes, the transfers contribute to a marked reduction in poverty. 10/ By helping maintain aggregate demand, unemployment compensation has played an important role in reducing the amplitude and duration of downturns in the business cycle.

There is concern about social security arrangements, for a number of reasons. One is the expected continuation of slow economic growth in these economies. Others are population ageing, the maturation of pension schemes and concern over abuses and disincentive effects. There is fear that current methods of funding are inadequate to meet emerging needs. To date, however, efforts to alter the sources of funding and the payments to beneficiaries have been small. The lingering question is whether universal benefits for all makes sense, or whether benefits should not be targeted to those most in need. There is growing concern that, in their current form, the social security systems of most developed countries are inadequate to cope with ageing, changes in family composition, high long-term unemployment and the evolution of more flexible working patterns for men and women.

**Table XI.1. Public expenditure on social security in developed market economy countries, 1960-1990**

(Percentage of GDP)

| | 1960 | 1970 | 1985 | 1990 |
|---|---|---|---|---|
| Austria | 10.8 | 13.9 | 20.6 | 19.8 |
| Belgium | 10.6 | 14.1 | .. | 24.8 |
| Canada | 4.7 | 8.7 | 15.1 | 12.8 |
| Finland | 4.8 | 7.6 | 13.2 | 12.1 |
| France | 9.2 | .. | 22.3 | 23.5 |
| Germany | 11.3 | 13.0 | 19.7 | 19.3 |
| Italy | 9.8 | 13.3 | 21.8 | 18.9 |
| Netherlands | 9.9 | 17.6 | 20.3 | 29.1 |
| Sweden | 6.8 | 14.1 | 20.4 | 21.2 |
| Switzerland | 5.7 | 7.8 | 13.8 | 13.9 |
| United States | 3.4 | 5.6 | 12.0 | 11.5 |

Source: The Department of Economic and Social Development of the United Nations Secretariat, based on OECD, The Future of Social Protection, OECD Policy Studies No. 6 (Paris, 1988), table 3; ILO, World Labour Report 1 (Geneva, 1984), table 6.3; H. Oxley and J. Martin, "Controlling government spending and deficits: Trends in the 1980s and prospects for the 1990s", OECD Economic Studies, No. 17 (Autumn, 1991), table 2.

### 1. Public pension provisions

The objective of public pension schemes is to ensure a minimum standard of living in retirement. Minimum entitlement levels for elderly persons ensure a reasonably satisfactory standard of living for every pensioner, irrespective of his/her prior earnings. While a few retirees depend solely on public pension benefits in their old age, most live on employer-provided benefits topped up with public pensions. When added together, employer plans and public-sector provisions provide retirement benefits which generally range from 40-60 per cent of earnings during employment. 11/ In many developed countries, workers retire several years before they receive a public pension and live adequately on pensions provided by their employers. 12/ This is *prima facie* evidence that for a sizeable proportion of the retiring population, public pensions are a supplement without which they could live reasonably well.

Virtually all public pension schemes in the developed market economy countries are pay-as-you-go schemes in which the current working generation pays for the current generation of retirees. 13/ Workers' and employers' social security contributions have been rising over the years and are projected to rise even more steeply in a number of countries in the years ahead (see table XI.2). This increase has in part been due to the fall in the ratio of workers over retired people (see table XI.3). In 1980, there were roughly five persons of working age for each retiree in the major developed market economy countries; in 2025, there are expected to be only three persons of working age for each retiree. 14/

Pensions are not only the major form of social security but also, after unemployment compensation, the fastest growing element of social security systems. Public expenditure on pensions has grown on average twice as fast as GDP since 1960. The increases were due in approximately equal parts to growth in the number of people over 65; coverage to include women, the self-employed and other previously excluded working groups; and increases in the real levels of pensions per beneficiary. With the share of pensioners in the population expected to rise from about 13 per cent in 1985 to probably over 20 per cent by 2040 (see table XI.3), developed countries will have to transfer more resources to the retired population. A small proportion of the increase will be offset by a decrease in the child dependency ratio, as expenditure on child-rearing and education declines. Higher payroll tax rates in the private sector will raise costs of production.

To date, modifications in public pension financing have been modest. 15/ They have mainly consisted of reducing entitlements, tightening eligibility conditions and raising the retirement age. The 1983 Social Security Amendment Act of the United States, for example, reduced early retirement benefits, subjected half of the pensions of people with high incomes to taxation and raised the retirement age from 65 to 67 years, effective after the year 2000. In Germany, the basis of pension determination was changed in 1986 from gross to net earnings. In Japan, several pension schemes and pension provisions for spouses were unified under the 1985 Pension Reform Act in order to eliminate the possibility of individuals or households receiving excessive pensions through eligibility under multiple pension schemes. Pension benefits in the United Kingdom were reduced in 1985 by basing them on lifetime earnings rather than the best 20 years, calculating benefits on 20 instead of 25 per cent of earnings and reducing spouses' rights to inherit entitlements. Incentives were introduced for firms to set up occupational schemes and for individuals to take out personal pensions. 16/ Longer-term approaches under consideration include a gradual de-indexation of benefit levels and a long-term phasing-in of modifications in pension policies that do not violate the principle of acquired rights. 17/

The scope for radical transformations or reforms of public pension schemes is limited and has been so perceived by policy makers. The option to finance pensions out of general revenue has been resisted in most countries. Proposals for a pronounced shift towards private-sector pension schemes have been met with concern over equity. Substantial reductions in pension benefits have not been seriously considered owing to the acquired rights of current

Table XI.2. Projected social security contribution rates needed to cover public pensions in developed market economy countries, 1990-2050

(Percentage of pay)

| Country | 1990 | 2000 | 2010 | 2020 | 2030 | 2040 | 2050 |
|---|---|---|---|---|---|---|---|
| Japan | 4.5 | 7.7 | 12.9 | 18.8 | 19.8 | 22.9 | 23.0 |
| Germany | 13.5 | 16.4 | 18.6 | 22.4 | 29.2 | 28.9 | 28.9 |
| United States | 12.1 | 11.9 | 12.0 | 12.2 | 12.3 | 16.8 | 16.4 |

Source: R. Hagemann and G. Nicoletti, "Population ageing: economic effects and some policy implications", OECD Economic Studies, No. 12 (Spring, 1989), table 7.

Table XI.3. Percentage of population aged 65 or over, in developed market economy countries, 1960-2040

| Country | 1960 | 1980 | 2000 a/ | 2020 a/ | 2040 a/ |
|---|---|---|---|---|---|
| Australia | 8.5 | 9.6 | 11.7 | 15.5 | 20.0 |
| Austria | 11.9 | 15.5 | 14.9 | 19.4 | 24.4 |
| Belgium | 12.0 | 14.4 | 15.0 | 18.5 | 22.3 |
| Canada | 7.6 | 9.5 | 12.9 | 18.8 | 22.7 |
| Denmark | .. | 14.4 | 14.9 | 20.1 | 25.2 |
| Finland | 7.5 | 12.0 | 14.6 | 21.7 | 23.2 |
| France | 11.6 | 14.0 | 15.2 | 19.5 | 23.1 |
| Germany | 10.6 | 15.5 | 17.0 | 21.7 | 28.0 |
| Greece | 8.1 | 13.1 | 15.0 | 17.9 | 21.2 |
| Iceland | 8.1 | 9.9 | 10.9 | 14.4 | 20.3 |
| Ireland | 11.1 | 10.7 | 11.2 | 12.7 | 17.2 |
| Italy | 9.1 | 13.4 | 15.4 | 19.1 | 24.9 |
| Japan | 5.7 | 9.1 | 15.1 | 21.0 | 22.7 |
| Luxembourg | .. | 13.5 | 16.8 | 20.3 | 22.3 |
| Netherlands | 8.6 | 11.5 | 13.5 | 19.0 | 25.0 |
| New Zealand | 8.6 | 9.7 | 11.1 | 15.2 | 21.9 |
| Norway | 11.1 | 14.8 | 15.0 | 18.2 | 23.1 |
| Portugal | .. | 10.2 | 13.3 | 15.4 | 20.6 |
| Spain | .. | 10.9 | 14.6 | 17.9 | 23.3 |
| Sweden | 11.8 | 16.3 | 16.6 | 20.8 | 22.8 |
| Switzerland | 11.0 | 13.8 | 16.8 | 24.4 | 28.6 |
| United Kingdom | 11.7 | 14.9 | 14.5 | 16.4 | 20.6 |
| United States | 9.2 | 11.3 | 12.2 | 16.2 | 20.0 |
| Unweighted average | 9.7 | 12.5 | 14.3 | 18.5 | 22.7 |

Source: OECD, The Future of Social Protection, OECD Social Policy Studies No. 6 (Paris, 1988), table 4. For 1980 cohort, OECD, Reforming Public Pensions, OECD Social Policy Studies No. 5 (Paris, 1988), table 3.1.

a/ Projected.

retirees and persons soon to retire and the political strength of growing numbers of well-organized pensioners.

Several factors have joined to produce a crisis in these institutional arrangements. In contrast to the 1950s and the 1960s, the decade of the 1980s was not one of sustained economic growth. Ageing adds to the demand for social security by increasing the number of people entitled to health care. 18/ Some estimates of expected increases are shown in table XI.4. Measures to contain health care costs, discussed in chapter III, would help to reduce the burden.

Table XI.4. Real social security expenditure on health care in selected developed market-economy countries, 1980-2025 a/

| Country | 1980 | 2000 | 2010 | 2025 |
|---|---|---|---|---|
| Canada | 100 | 128 | 140 | 174 |
| France | 100 | 117 | 125 | 130 |
| Italy | 100 | 113 | 117 | 121 |
| Japan | 100 | 130 | 140 | 147 |
| United Kingdom | 100 | 105 | 105 | 115 |
| United States | 100 | 130 | 144 | 180 |

Source: P. Heller, R. Hemming and P. Kohnert, Aging and Social Expenditure in the Major Industrial Countries, 1980-2025, IMF Occasional Paper No. 47 (Washington, D.C., 1986), table 8.

Note: Index: 1980 = 100.

a/ Assuming no increase in real expenditure per capita by age group over 1980 levels. Does not include expenditure on medical research and education, administration and capital investment in the health sector.

### 2. Unemployment compensation

Unemployment compensation programmes guarantee an income to unemployed individuals with a previous record of employment. The recipients are expected to return to work within a relatively short time. Most commonly, there is a uniform basic benefit supplemented by another amount which varies with the worker's past income. Unemployment benefits are usually paid for a year or less. In France and Germany, the period is longer for older workers; in Canada, it varies with the length of previous employment; in the Netherlands, it may be extended to two years; there is no time-limit in Belgium. The level of unemployment benefits is reduced after a specified period. Smaller income-support provisions are available to the unemployed after their eligibility for unemployment benefits has run out. While expenditure on unemployment compensation is relatively small compared to public pensions and public health care (see table XI.1), the effect of unemployment on the government budget is substantial when revenue losses are also taken into account. Revenue losses include income taxes and social security contributions the unemployed would otherwise have paid. 19/ There has also been concern in some countries that overly generous benefits raise a moral hazard problem and result in abuses.

Since the early 1970s, total expenditure on unemployment compensation has risen in the developed market economy countries (see table XI.5) as a result of both higher unemployment levels and increases in benefits. Benefits increased primarily because more high-income employees lost their jobs and were paid higher earnings-related benefits. On the other hand, unemployment coverage since the early 1980s has tended to fall as a result of new labour

Table XI.5. Expenditure on unemployment compensation as a percentage of GDP a/ in developed market-economy countries, 1970-1989

| Country | 1970 | 1975 | 1980 | 1988-1989 |
|---|---|---|---|---|
| Australia | 0.03 | 0.69 | 0.76 | 0.99 |
| Austria | 0.29 | 0.39 | 0.44 | 0.83 |
| Belgium | 0.44 | 1.55 | 2.60 | 2.25 |
| Canada | 1.67 | 2.76 | 2.32 | 1.58 |
| Denmark | 0.42 | 2.38 | 3.03 | 3.24 |
| Finland | 0.21 | 0.21 | 0.41 | 0.66 |
| France | 0.32 | 0.78 | 1.46 | 1.34 |
| Germany | 0.40 | 1.49 | 1.12 | 1.30 |
| Greece | 0.19 | 0.35 | 0.31 | 0.39 |
| Ireland | 1.28 | 2.31 | 2.12 | 3.42 |
| Italy | 0.18 | 0.45 | 0.47 | 0.40 |
| Japan | 0.27 | 0.48 | 0.40 | 0.36 |
| Netherlands | 0.23 | 0.70 | 0.57 | 2.64 |
| New Zealand | 0.02 | 0.07 | 0.49 | 1.06 |
| Norway | 0.09 | 0.11 | 0.23 | 1.05 |
| Spain | 0.14 | 0.48 | 2.11 | 2.33 |
| Sweden | 0.27 | 0.24 | 0.39 | 0.60 |
| Switzerland | .. | 0.17 | .. | 0.19 |
| United Kingdom | 0.47 | 0.70 | 0.94 | 0.94 |
| United States | 0.42 | 1.18 | 0.62 | 0.38 |

Source: OECD, High Unemployment: A Challenge for Income Support Policies (Paris, 1984), table 1; for 1988-1989 data, OECD, Labour Market Policies for the 1990s (Paris, 1990), table 14.

a/ Excluding administration costs.

market conditions. Youth unemployment and long-term unemployment have risen in many countries, but many youths lack a previous employment record and cannot claim unemployment compensation, and many long-term unemployed have exhausted their claims to benefits. Married women also represent a rising proportion of the unemployed and are often inadequately covered by unemployment insurance because of incomplete or part-time employment records.

Policies in some countries have responded to these problems. The period of employment needed for youths to qualify for unemployment benefits has been reduced in Australia and Belgium, and unemployment insurance was extended to youth aged 16 and 17 in Denmark. Several countries, including Australia, France, Ireland and the United Kingdom, have emphasized training programmes in order to raise skills and improve information in labour markets.

### 3. Family allowances

The purpose of family benefits is primarily income maintenance. Typically, assistance is provided to families with dependent children, either directly as government expenditure or indirectly as tax concessions. Germany and the United Kingdom rely on government expenditure; Canada and France offer a combination of direct grants and tax concessions; the United States provides supplementary welfare benefits to poor families which increase with the number of dependent children, as well as tax concessions; Belgium has instituted a "right" to a minimum level of existence through its Supplementary Benefits Act and Family Income Supplements Act. 20/ Because of the heavy reliance in many countries on tax concessions, the effective cost of family benefits is larger than appears from an analysis of direct expenditure alone.

Mainly because of the drop in the number of children, family benefits have been on the decline (see table XI.6). 21/ This trend has been modified by the need to support a growing number of lone-parent, mostly low-income families (see table XI.7). Lone-parent families now constitute 10-15 per cent of all families with children. 22/ Divorce rates have risen dramatically, and rates of re-marriage have declined. Births out of wedlock have also increased in incidence (see table XI.8). In the United States, the programme of Aid to

Table XI.6. Expenditure on family allowance as a percentage of total social security and welfare payments in developed market-economy countries, 1960-1989

| Country | 1960 | 1973 | 1979 | 1984 | 1988-1989 |
|---|---|---|---|---|---|
| Austria | 12.8 | 11.5 | 14.7 | 11.1 | 10.1 |
| Denmark | 11.7 | 17.8 | 12.8 | 11.8 | 15.9 |
| Finland | 25.0 | 7.5 | 9.2 | 8.3 | .. |
| France | 32.9 | 18.9 | 14.7 | 13.9 | .. |
| Germany | 2.1 | 2.5 | 7.3 | 4.9 | 5.1 |
| Greece | 3.6 | 4.1 | 5.4 | 3.4 | .. |
| Ireland | 20.9 | 15.8 | 9.2 | 8.7 | .. |
| Italy | 29.0 | 10.3 | 6.7 | 5.3 | .. |
| Netherlands | 15.9 | 12.1 | 8.7 | 8.4 | 6.6 |
| Norway | 14.6 | 12.4 | 7.4 | 10.2 | 10.3 |
| Portugal | 35.3 | 30.1 | 8.8 | 6.6 | .. |
| Spain | .. | 22.1 | 4.6 | 1.8 | .. |
| Sweden | 18.0 | 13.1 | 9.1 | 7.0 | 6.9 |
| Switzerland | 3.2 | 2.6 | 2.9 | 2.8 | .. |
| United Kingdom | 11.3 | 10.3 | 18.3 | 16.6 | 16.7 |

Source: ILO, From Pyramid to Pillar: Population Change and Social Security in Europe (Geneva, 1989), table 10 and national sources.

Table XI.7. Lone-parent families as a percentage of all families in four developed market-economy countries, in selected years

| Country | Year | Percentage |
|---|---|---|
| Netherlands | 1960 | 9.3 |
| | 1971 | 8.9 |
| | 1981 | 12.3 |
| | 1987 | 10.8 |
| Sweden | 1960 | 9.0 |
| | 1970 | 9.6 |
| | 1980 | 14.2 |
| | 1985 | 17.0 |
| United Kingdom | 1961 | .. |
| | 1971 | 8.0 |
| | 1984 | 13.0 |
| | 1990 | 19.0 |
| United States | 1960 | 11.0 |
| | 1970 | 13.0 |
| | 1984 | 26.0 |
| | 1989 | 28.0 |

Source: OECD, Lone-Parent Families: The Economic Challenge, OECD Social Policy Studies No. 8 (Paris, 1990), table 2.1 and national sources.

Table XI.8. Births outside marriage in selected developed market-economy countries

(Percentage)

| Country | 1964 | 1984 | Latest year |
|---|---|---|---|
| Belgium | 2 | 8 | 8 a/ |
| Denmark | 9 | 43 | 46 b/ |
| France | 6 | 18 | 26 c/ |
| Germany | 5 | 9 | 16 c/ |
| Netherlands | 2 | 6 | 9 d/ |
| Sweden | .. | 45 | 47 b/ |
| Switzerland | .. | 6 | 6 b/ |
| United Kingdom | 4 | 19 | 27 e/ |

Source: OECD, Lone-Parent Families: The Economic Challenge, OECD Social Policy Studies No. 8, Paris, 1990, Charts 2.2 and 2.5.

a/ 1986.

b/ 1990.

c/ 1988.

d/ 1987.

e/ 1989.

Families with Dependent Children (AFDC) under the Social Security Act of 1935 was designed to provide a small group of poor widows with sufficient income to stay home and care for their children. As late as 1960, only 7 per cent of all children lived with single mothers. This proportion is now more than 20 per cent. In the United States, more than half the children born today will spend some time in a mother-only family, and half of all similar families are likely to be poor. 23/ These changes have eroded the income security that nuclear family structures have traditionally provided. While public perceptions and opinions vary about parental responsibility and childbirth out of wedlock, there is consensus that children should not be left unprotected. The challenge with respect to lone-parent families has been to find means to make absconding parents, often fathers, pay for child support and to enable the lone parent to find adequately remunerative work. Programmes to provide child care to working mothers perform an important function here.

## B. Developing countries

Providing social security in low-income countries is in practice a very different proposition from doing so in richer countries. Natural disasters there often throw people into destitution, both because the absence of infrastructure raises the destructiveness of disasters and because resources to fall back on tend to be very slim. Consequently, famine relief and disaster relief occupy a much more prominent place in social security programmes in developing countries than in developed countries.

Further, providing social assistance to the poor when they comprise 50-75 per cent of the population is not the same thing as providing for them when they comprise 10 or 15 per cent. For many in developing countries, severe deprivation is not a matter of an unfortunate fall from a previously more comfortable position but rather a chronic state arising from the absence of any assets to ensure an income. It is difficult to design the administration of a social security system where financial markets are rudimentary, employment is casual and the beneficiaries are illiterate. 24/

Social security schemes have grown impressively during the past two decades, but they cater mainly to people with secure employment and steady incomes and exclude those whose needs for social security are the biggest. 25/

Among the regions, social security systems are most extensive and developed in Latin America. In several countries, they cover more than 50 per cent of the economically active population (see table XI.9). In Argentina, Chile, Costa Rica and Uruguay, the ratio of social security expenditure to GDP exceeds 10 per cent, while in Central American countries, the corresponding ratio is about 2 per cent. They are much less extensive in coverage and less generous in Asia (see table XI.10). 26/ Sub-Saharan African countries have the most rudimentary systems. The percentage of the labour force, not including civil servants, covered by social security benefits in Africa ranged from 1 per cent in Chad, Gambia and Niger to 22 per cent in Egypt and 24 per cent in Tunisia. 27/

Social security pensions in most of the developing countries are limited to military personnel, civil servants and workers in large-scale enterprises. These are a privileged minority. This inequity is compounded in countries where proceeds from general revenue have to supplement payroll taxes in funding social security transfers. It is estimated that in Latin America the insured pay less than one third of the benefits they receive, with the rest coming from the population at large through government subsidies and employer contributions. 28/

The role of the State in social security varies from country to country, ranging from government participation in tripartite financing systems to the administration and financing of the entire social security system. Evasion or delay in the payment of contributions is in some countries quite common both of employers and Governments, which disrupts the systems profoundly. In 1979, the Government of Chile decided to establish a compulsory private-sector savings plan, proceeds from which would provide retirement benefits to individuals. Some incentives were provided for employers to change over to the new scheme and all new entrants after 1982 were required to join it. The role of the Government was to regulate the functioning of the schemes and to ensure a minimum payment to each participant upon retirement. 29/

### Table XI.9. Persons covered by social security benefits in Latin America and the Caribbean, 1980

| | No. of years since first social security laws enacted | Economically active population covered (percentage) | Statutory contribution rate a/ | Ratio of pensioners to contributors | Estimated cost of universal coverage as a percentage of GDP b/ |
|---|---|---|---|---|---|
| Argentina | 70 | 69 | 46 | 0.32 | 15.1 |
| Bolivia | 40 | 18 | 25 | 0.33 | 11.4 |
| Brazil | 70 | 96 | 26 | 0.18 | 5.4 |
| Chile | 70 | 62 | 29 | 0.46 | 16.3 |
| Colombia | 50 | 22 | 30 | 0.05 | 18.4 |
| Costa Rica | 50 | 68 | 27 | 0.06 | 9.2 |
| Cuba | 70 | 93 | 10 | 0.21 | 8.6 |
| Dominican Republic | 50 | 14 | 14 | .. | 11.9 |
| Ecuador | 60 | 23 | 21 | 0.15 | 39.9 |
| El Salvador | 40 | 12 | 12 | 0.08 | 21.0 |
| Guatemala | 30 | 33 | 20 | 0.06 | 11.3 |
| Haiti | 30 | 2 | 12 | .. | - |
| Honduras | 40 | 13 | 14 | 0.02 | 12.3 |
| Mexico | 50 | 42 | 18 | 0.08 | 5.4 |
| Nicaragua | 40 | 19 | 16 | 0.08 | 25.3 |
| Panama | 50 | 46 | 21 | 0.12 | 12.2 |
| Paraguay | 50 | 14 | 20 | 0.07 | 6.6 |
| Peru | 60 | 37 | 21 | 0.09 | 15.7 |
| Uruguay | 70 | 81 | 33 | 0.65 | 11.8 |
| Venezuela | 30 | 50 | 14 | 0.06 | 2.9 |

*Source*: C. Mesa-Lago, "Comparative study of the development of social security in Latin America", *International Social Security Review*, vol. 2, No. 86 (1986), table 1. For the last column on the share of GDP that would have to go to social security if population coverage were complete, see C. Mesa-Lago, *La Seguridad Social y el Sector Informal*, Investigaciones sobre Empleo No. 32 (Geneva, ILO, 1990), table 9.

a/ Percentage of pay to be contributed by the insured person, the employer and the State.

b/ Estimated cost of social security benefits with universal coverage as a share of GDP, based on extrapolations of actual social security coverage and share of GDP in 1980.

Table XI.10. Social security benefits as a percentage of GDP and components of social security as a percentage of total social security expenditure, 1986

| | Social security benefits as a percentage of GDP | Components of social security | | | |
|---|---|---|---|---|---|
| | | Pensions | Health care | Family allowances | Unemployment benefits |
| Africa | | | | | |
| Benin | 0.5 | 62.8 | 6.5 | 30.7 | - |
| Burkina Faso | 0.4 | 52.9 | 8.9 | 38.2 | - |
| Burundi | 0.5 | 60.3 | 39.7 | - | - |
| Cameroon | 0.5 | 13.0 | 11.6 | 65.8 | - |
| Cape Verde | 1.2 | 11.2 | 52.8 | 36.0 | - |
| Central African Republic | 0.8 | 34.5 | 11.1 | 54.4 | - |
| Chad | .. | 10.8 | 65.3 | 23.9 | - |
| Côte d'Ivoire | 0.6 | 33.2 | 21.9 | 44.9 | - |
| Egypt | 2.4 | 96.8 | 2.9 | - | - |
| Gabon | 2.9 | 23.6 | 63.5 | 13.0 | - |
| Guinea | .. | 25.3 | 19.0 | 55.7 | - |
| Guinea-Bissau | 0.1 | 49.6 | 27.2 | 23.1 | - |
| Madagascar | 0.5 | 50.9 | 8.1 | 41.0 | - |
| Mali | 0.9 | 53.1 | 16.6 | 30.2 | - |
| Morocco | 1.8 | 54.1 | [illegible].7 | 44.2 | - |
| Mauritania | .. | 23.1 | 18.6 | 58.3 | - |
| Mauritius | 3.2 | 90.7 | 1.0 | 3.0 | 5.3 |
| Mozambique | 0.1 | - | 100.0 | - | - |
| Niger | 0.8 | 19.6 | 12.4 | 68.0 | - |
| Rwanda | 0.2 | 75.5 | 24.6 | - | - |
| Sao Tome | .. | 98.8 | 1.2 | - | - |
| Senegal | 1.2 | 71.9 | 6.7 | 21.4 | - |
| Sudan | 0.0 | 88.1 | 11.9 | - | - |
| Togo | 0.9 | 42.9 | 16.3 | 40.8 | - |
| Tunisia | 4.8 | 53.8 | 23.4 | 22.8 | - |
| Zaire | 0.1 | 67.8 | 0.7 | 31.5 | - |
| Zambia | 0.2 | 98.7 | 1.3 | - | - |
| Latin America and the Caribbean | | | | | |
| Argentina | 5.9 | 78.6 | 14.5 | 27.2 | 0.8 |
| Bahamas | 1.1 | 53.0 | 47.0 | - | - |
| Barbados | 4.5 | 75.0 | 10.7 | - | 14.2 |

Table XI.10 (continued)

|  | Social security benefits as a percentage of GDP | Components of social security |  |  |  |
|---|---|---|---|---|---|
|  |  | Pensions | Health care | Family allowances | Unemployment benefits |
| Belize | 0.3 | 26.2 | 73.9 | - | - |
| Bolivia | 1.6 | 36.4 | 61.0 | 2.2 | 0.3 |
| Brazil | 4.6 | 63.3 | 33.0 | 3.7 | - |
| Colombia | 1.0 | 84.4 | 15.6 | - | - |
| Costa Rica | 6.0 | 26.7 | 73.3 | - | - |
| Chile | 12.0 | 70.8 | 20.0 | 7.0 | 1.1 |
| Dominica | 1.0 | 45.4 | 54.6 | - | - |
| Dominican Republic | 0.4 | 32.6 | 67.4 | - | - |
| Ecuador | 2.7 | 59.0 | 37.2 | - | 3.9 |
| El Salvador | 0.8 | 34.5 | 65.5 | - | - |
| Guatemala | 0.7 | 26.6 | 73.3 | - | - |
| Guyana | 2.2 | 77.2 | 22.8 | - | - |
| Honduras | 0.9 | 13.8 | 86.2 | - | - |
| Jamaica | 1.2 | 82.4 | 17.6 | - | - |
| Mexico | 2.0 | 30.0 | 70.0 | - | - |
| Panama | 7.8 | 46.8 | 53.2 | - | - |
| St. Lucia | 0.5 | 51.7 | 48.3 | - | - |
| Trinidad and Tobago | 1.7 | 91.3 | 8.7 | - | - |
| Uruguay | 8.9 | 81.8 | 10.1 | 6.7 | 1.4 |
| Venezuela | 1.1 | 34.1 | 65.9 | - | - |
| Asia |  |  |  |  |  |
| Bahrain | 0.3 | 85.7 | 14.3 | - | - |
| Bangladesh | 0.0 | 36.8 | 63.2 | - | - |
| India | 1.5 | 89.2 | 10.8 | - | - |
| Indonesia | 0.0 | 59.2 | 40.8 | - | - |
| Jordan | 0.5 | 86.4 | 13.6 | - | - |
| Malaysia | 2.1 | 94.7 | 5.3 | - | - |
| Myanmar | 0.0 | - | 100.0 | - | - |
| Pakistan | 0.8 | 34.2 | 65.8 | - | - |
| Philippines | 0.6 | 71.0 | 29.0 | - | - |
| Singapore | 10.5 | 99.2 | 0.8 | - | - |
| Sri Lanka | 2.3 | 99.7 | 0.3 | - | - |
| Thailand | 0.0 | - | 100.0 | - | - |

Source: ILO, The Cost of Social Security: Thirteenth International Inquiry, 1984-1986 (Geneva, 1992), tables 3 and 10.

In the initial stages of social security systems, social security funds accumulate surpluses. In some countries, these surpluses may rise to half of GDP. 30/ Often, they are invested in low-yielding government bonds to cover budget deficits, but when soundly invested, as in the case of the Central Provident Fund in Singapore, these surpluses can help develop infrastructure, including low-income housing and ensure adequate returns. 31/ A contrasting example is the collapse of Brazil's Banco National de Habitacao where the value of its mortgage loan contracts fell behind the general price level in recent years of rapid inflation. 32/ The large initial reserves are depleted by negative real yields from investments and the rising expenditure. Low retirement ages of 50 or 55 years and generous compensation of between 80 and 100 per cent of salaries become increasingly difficult to sustain. 33/ The National Retirement System, begun in 1904 in Argentina, is now deeply in debt because of recurring current account deficits, and it pays a wholly inadequate pension. Recourse has to be had to general revenue.

Social security funds for health care benefits are common in developing countries but are narrow in coverage. Where curative services are provided in hospitals that are administered and financed by social security institutions, it is not uncommon for the affiliated members to try to block collaborative arrangements with the health ministry to keep the level and quality of services provided through social security institutions at a higher level than in other institutions. 34/

In some countries in Africa and Latin America, social security benefits include family allowances. These schemes typically consist of aid to mothers and infants in the form of antenatal allowances, maternity allowances, medical expenses during pregnancy, family allowances proper and daily allowances paid to wage-earning women on maternity leave. However, because they are financed from employers' social insurance contributions, the benefits go only to a small number of families in the formal sector.

The fact that the mass of the population is excluded from social insurance schemes has induced Governments to move beyond conventional approaches and to attempt to provide social protection on a wider basis. Because of the low incomes of the excluded groups, the measures that have been introduced to protect self-employed and informal-sector workers have relied heavily on general revenue. The primary emphasis has been on universal health care and other means to assure a minimum level of well-being. In Latin America, in particular, policies of restricting insured health care protection to relatively small, privileged groups have been replaced by health care systems that also embrace self-employed workers and marginalized social groups.

Health protection measures for the wider population are often virtually indistinguishable from national primary health care programmes. For example, Brazil, Costa Rica and Uruguay have achieved virtually complete health care coverage through public assistance programmes, with social security participation consisting of budgetary support to the health sector via levies on affiliated employers. In Mexico and Ecuador, special health care programmes for the rural population have been funded out of general revenue and administered by social security institutions. 35/ Special non-contributory social protection provisions for self-employed workers have also been adopted in Algeria, Egypt, Gabon, Libyan Arab Jamahiriya, Mauritius, Seychelles and Tunisia. 36/ Mauritius also has a low-income family allowance scheme which pays a standard monthly allowance to mothers who are at least 21 years old. Family allowances are paid for a maximum of three children under the age of 15 years. 37/ In Asia, there has been much less progress. 38/

A number of developing countries provide contributory old-age pensions to self-employed workers. Old-age, invalidity and death or survivorship benefits are available to the self-employed in Argentina, Chile, Costa Rica, Guatemala, Mexico, Panama, Peru, Sri Lanka and Venezuela. The population covered in most countries is not extensive. 39/ Technical and administrative difficulties in identifying and enrolling target populations partly explain the narrow coverage. 40/ Public-sector subsidies have been necessary for self-employed workers who do not have employers to make payroll tax contributions on their behalf. 41/

The social security systems of some countries also include a number of complementary non-contributory social assistance schemes. Emergency employment programmes, for instance, have been mounted in urban areas as forms of unemployment compensation to workers during times of economic stabilization and adjustment, as in Chile in 1983 when employment in urban infrastructure construction was offered to 13 per cent of the labour force, bringing the unemployment rate down from 32 per cent to 19 per cent. 42/ Other self-selection public employment schemes, notably India's Maharashtra Employment Guarantee Programme, have provided a form of insurance against a risky agricultural environment by offering unskilled work to anyone who wants it at a wage rate that only the poor find attractive. 43/ The social security systems of some countries also include the distribution of food to poor and vulnerable groups. In Jamaica, for instance, food stamps are targeted through public health systems to pregnant women and infants and, in Sri Lanka, stamps for food and kerosene have been targeted to the lower-income half of the population. 44/ The reduction or removal of food subsidies or other social assistance entitlements risks creating negative reactions among recipients denied the benefits. 45/

## C. Economies in transition

Market-oriented reforms in Eastern Europe and the former Soviet Union have put severe strains on public programmes for social protection. Policy-makers are confronted with a number of issues largely unknown in the recent past, including a sharp rise in unemployment, the loss of purchasing power due to sharp price increases and worsening poverty among vulnerable social groups.

The contraction of output and government revenue means that government expenditure needs to be restrained to reduce inflationary pressures. The mass of the population continues to expect that society will honour its welfare commitments. In a spirit of social solidarity, it could revitalize collaboration between the Government and voluntary and civic organizations to extend a "safety net" to the growing number of vulnerable people. There is the contrasting wish to reduce the size of government and the notion that wealth creation is more important than redistribution, but it has also been argued that the creation of safety nets may be a condition for economic reforms. 46/

The ratio of government expenditure on social security to GDP has been traditionally high in economies in transition, comparable to that in OECD countries (see table XI.11). Although these welfare provisions have been criticized as formal and inadequate, 47/ they were important in household incomes. In Hungary at the end of the 1980s, consumer subsidies constituted between 48 and 72 per cent of the personal income of the poorest 20 per cent of the population; for large families, the proportion ran as high as 82 per cent. For families with two or more children in all income groups, subsidies represented more than 40 per cent of personal income; for those with more than three children, as much as 57.3 per cent. 48/ In 1991, the size of family allowances as a percentage of gross income varied between 5 and 6 per cent in Czechoslovakia, Hungary and Poland, and between 2 and 3 per cent in Bulgaria and Russia. 49/

Table XI.11. Ratio of expenditure on social security to GDP in European economies in transition, 1988-1991

| | 1988 | 1990 | 1991 |
|---|---|---|---|
| Bulgaria | 10.1 | 13.0 | 12.1 |
| Czechoslovakia | 11.7 | 12.0 | 15.0 |
| Hungary | 15.4 | 17.5 | 24.0 |
| Poland | 11.2 | .. | .. |
| Romania | 7.9 | 8.6 | 7.3 |
| OECD Europe (1989) | .. | 19.0 | .. |

Source: Department of Economic and Social Development, United Nations Secretariat, based on Bank for International Settlements, 62nd Annual Report, (Basel, 1992).

The share of pensions in household gross income varied significantly. According to some estimates, at the end of the 1980s, pensions as a percentage of average wages in State-sector jobs were some 68 per cent in Hungary and Yugoslavia, 48 per cent in Bulgaria, Czechoslovakia and Poland, and about 37 per cent in Russia. 50/

The pension systems have run into several problems. The ageing of the population and the growing number of beneficiaries under old age, disability and survivor benefit programmes have made it difficult to maintain the payments. The effective retirement age, typically 60 years for men and 55 for women, is lower in many Eastern European countries than in OECD countries. Social assistance was treated as a residual element of expenditure, of secondary importance. That practice resulted in numerous distortions and "holes" in the safety net, particularly for pensioners, disabled persons and other disadvantaged groups, who were brought to the brink of poverty. For example, in Czechoslovakia, hidden poverty and growing differences in income between various population groups became a social issue of much importance.

Between 1965 and 1988, there was a decline in the real value of disability, family and pension benefits. 51/ Many retired people were forced to take part-time jobs to supplement their income because pensions did not keep up with wages and consumer prices.

The lack of a detailed legal framework led to arbitrary interpretations in the administration of social assistance. When legal criteria for implementation of the provisions of the law were absent, internal administrative instructions of each ministry took over. Thus, in Poland, broad provisions in the laws and their lack of precision left room for arbitrary decisions in the provision of social assistance. 52/ Numerous instructions and regulations issued by government offices often contradicted the spirit, if not the letter, of the laws.

There has been a growing understanding that the value of social assistance is more substantial when this assistance is well-targeted. The differentiation of incomes which most probably will continue makes the plight of the poorest and most vulnerable groups more sensitive. In most countries, efforts to make assistance more focused relied, along with increased cash transfers, on services in kind (provision of free or subsidized meals, special home delivery programmes and food coupons).

Consumer subsidies were an important component of social security programmes in these countries. Despite the best intentions of Governments, the bulk of these benefits went to non-vulnerable groups. In addition, subsidized prices provided the wrong signals for resource allocation. 53/ The elimination of subsidies became one of the obvious priorities in stabilization programmes. The decline in government revenue made the reduction of subsidies even more compelling. Subsidies were discontinued for a wide range of consumer goods and social services, compensating the neediest groups with cash transfers. In 1990-1991, the share of subsidies as a percentage of GDP decreased in Bulgaria from 16.1 to 3.5 per cent, in Czechoslovakia from 14.0 to 4.2 per cent, and in Romania from 7.5 to 5.7 per cent; in Hungary, where the decline started earlier, it was more gradual - from 11.8 per cent of the GDP in 1988 to 8.2 per cent in 1991 54/ (see table XI.12). It became evident that to eliminate subsidies fast would be to endanger the physical survival of groups at high risk. It was decided to target the subsidies more precisely for vulnerable groups.

New models of social security and, in broader terms, social policy itself, have been at the centre of public debate. Political developments, including rising public anger over deteriorating living conditions, put the social impact of the reform programmes very high on the agenda. Policy makers were forced to reassess the social implications of the transition. The nature of the new arrangements is clearer in the countries which started the process earlier, although everywhere there is an evident quest for new approaches.

In the short term, Governments implemented a number of immediate measures to mitigate the adverse social effects of their stabilization programmes, to shield the most vulnerable segments of the population and to reduce social tensions. Those steps included poverty relief measures to offset rising prices and the provision of a minimum unemployment benefit.

Table XI.12. Ratio of consumer subsidies to GDP in European economies in transition, 1988-1991

| | 1988 | 1990 | 1991 |
|---|---|---|---|
| Bulgaria | 17.6 | 16.1 | 3.5 |
| Czechoslovakia | 13.0 | 14.0 | 4.2 |
| Hungary | 11.8 | 8.9 | 8.2 |
| Poland | 16.0 | 7.5 | 5.5 |
| Romania | 0.5 | 7.5 | 5.7 |
| OECD Europe (1989) | .. | 2.0 | .. |

Source: Department of Economic and Social Development, United Nations Secretariat, based on Bank for International Settlements, 62nd Annual Report (Basel, 1992).

Introduction of unemployment insurance was one of the first measures of social reform undertaken in practically all European economies in transition (see chap. VI for details). From Albania to the republics of the former USSR, new laws were passed authorizing the provision of benefits to the unemployed. Employment acts in Hungary and Czechoslovakia provided for public works programmes for the unemployed and for support for the self-employed. Although introduced as transition measures, those policies are likely to be retained and form a basis for new social security schemes.

Facing serious financial constraints, economies in transition find it hard to maintain living standards for the elderly. Because of continued inflation, it has been difficult to secure the value of pensions in real terms. In order to remedy the situation, different schemes have been introduced. In Hungary, for example, one of the options envisioned is a ceiling on pensions while at the same time indexing all pensions. In Russia, a law passed in 1992 also provided for pensions to be indexed every three months. In Hungary, Poland and Russia, the Governments encouraged the creation of new private pension funds to supplement government-supported social insurance benefits. In Russia, a national insurance pension fund has been sponsored by a private insurance company, two commercial banks and the ministries of social protection and labour. Its profits are expected to provide benefits to individual members and to become an important supplement to their government-provided pensions. 55/

In order to speed up the integration of the disabled into the new market-oriented system, far-reaching laws were enacted in Poland in July 1991 to provide equal opportunities for disabled people at work. The law requires enterprises to create conditions of work which would enable those who had suffered from occupational diseases or accidents at work to continue working. Enterprises which fail to create such conditions are required to pay out of their after-tax profits to the State Rehabilitation Fund for the Disabled a sum equal to 40 times the monthly national average wage of each worker. The

Fund was established in 1991, financed with income from enterprises, Government and other sources. It provides financial assistance and training to the disabled. 56/

In some cases, the generosity of pensions has been one of the main reasons for the escalating costs of social security. In Poland, for instance, since 1990 there has been a growing number of pensioners as a result of liberal disability allowances and early retirement layoffs. The other factor contributing to higher costs has been an increase in pensions relative to average wages. At the same time, there has been a decrease in revenue due to a lower level of employment. 57/

It has been recognized that local rather than central governments are better positioned to provide some types of assistance to families in need and to reach target groups. 58/ The budgetary independence of local governments varies. In Romania and Bulgaria, the social expenditure of local governments continued to be funded primarily by the central government, which also retained supervisory functions. In Czechoslovakia and Poland, local authorities became financially independent, complementing centrally allotted funds with additional revenue from taxes on enterprises or individual residents. In Hungary and Russia, while child and unemployment benefits were provided out of the central budget, most social assistance was left to local governments.

Sharing social security payments between the central government and other entities, including the private sector, became an important feature of reform. The creation of alternative private pension plans was recognized as an extension of the freedom of choice and an increase in security for the retirees. In Hungary, the pension fund was separated from the central budget in 1989. In Poland, the Social Insurance Fund, providing benefits like pensions, family allowances and sickness and maternity benefits, and operating on a pay-as-you-go basis, is financed by contributions from enterprises with deficits covered by transfers from the central government budget.

The commitments of public enterprises to provide social security has been scaled back. The old practice limited benefits to the employees of those enterprises. Crèches and kindergartens are being transferred to local governments. At the same time, administration of health insurance and of certain welfare activities that used to be in the hands of trade unions was shifted back to national or local government institutions.

Demands for macroeconomic and price stability compete with the political necessity to maintain social security benefits. The creation of an effective and financially sustainable system of social security becomes an immediate priority. Without it, the process of change itself might run into unsustainable political opposition. 59/

## D. Targeting

Given the severe limits to government expenditures, targetting social service expenditure towards the most deserving has drawn much interest. However, there are several practical problems associated with schemes to narrow entitlements to social security benefits. The first is that schemes to benefit weaker groups of society may not be socially acceptable. A part of the economic price paid for the scheme to be politically acceptable may be to extend benefits beyond target groups. Free university education in many developing countries is mostly made use of by the higher-income classes; this is the price paid for providing lower-income groups with some access to university education. Programmes for raising living standards of the poorest sections of the population have been most successful in economies where facilities have been provided universally.

Secondly, costs of administering targeted schemes are high. In the United Kingdom, universal schemes cost 3.5 per cent of total outlay to administer, contrasted with a range of 5-15 per cent in targeted schemes. 60/ In developing countries, the low competence in public administration and the widespread illiteracy among beneficiaries make the problems worse. The collection of information itself is costly. The selection process provides opportunities for corruption at many levels, especially where the weaker sections of the population come into contact with low-level officials in the administration.

Thirdly, however well designed, the process of selection will cut out some deserving persons, whereas that would not occur in a universal scheme.

Finally, there are questions of stigma and the surrender of private information to Governments. For example, household registration books (hukou bu) in China and similar documents in other countries contain information not only necessary to target social services but also useful in controlling the movement of people. 61/

These problems point to the need for great care in designing and implementing policies to target benefits to particular groups.

## E. Conclusions

Ageing populations, slow economic growth, a more unequal distribution of income and changing family structures have all raised fundamental questions about the provision of social security in all countries. In the economies in transition, there is a search for new arrangements. In developing countries the emergence of new poverty groups has heightened the need to extend social security. The new demands arise in a period of fiscal stringency brought about by a need to keep down government expenditure in order to restrain aggregate demand. There is also reluctance on the part of the public to pay higher taxes. In the design of social security schemes, new flaws have been identified. Some provisions have become disincentives to work; others have been found to be inequitable and inefficient in delivery.

Social security provisions come from transfer payments. In developed countries, there is much concern that as marginal rates of transfer increase, the losses in economic efficiency are larger than the gains. Increased productivity per worker, delayed retirement or a larger proportion of young workers in the labour force, by encouraging net immigration, might reduce these losses. Lower unemployment would both reduce payments to the unemployed and increase contributions to social security funds. Legal remedies are being sought to compel absconding parents, often fathers, to pay for the maintenance of their children. Delivery systems have been decentralized in order to reduce inefficiency. There are measures to target benefits better in order to reduce expenditure and to raise efficiency and equity.

In economies in transition, the weaving of "safety nets" is essential if radical institutional changes in the economy and society are to be politically acceptable. Since it takes time for safety nets to be put in place, the pace of economic transition has to be slow.

In developing countries, social security is mostly provided by family and voluntary agencies. Government services tend to benefit those in the higher income brackets. Much is done in times of emergency to provide food and shelter. There are also instances of successfully providing social security in countries with low levels of income by means of food subsidies, public health services and similar benefits. However, social security in these societies depends primarily on economic development and the eradication of poverty.

## Notes

1/ The emphasis here is on what Drèze and Sen term "protective" social services, as distinct from "promotional" services. The latter group is discussed in chaps. II-V, VII and VIII of this Survey. For the distinction, see Ahmad Ehtisham, and others, eds., Social Security in Developing Countries (Oxford, Clarendon Press: 1991), pp. 1-40.

2/ See Assar Lindbeck, "Consequences of the advanced welfare state", The World Economy (March 1988), pp. 19-37. Also see Gary Burtless "The economist's lament: public assistance in America", Journal of Economic Perspectives, vol. 4, No. 1 (Winter, 1990), pp. 57-78, who argues that "evidence cannot resolve the underlying conflict between those who believe more should be done to help the working poor and their children and those who resent subsidizing illegitimacy, family desertion and consumption of leisure among able-bodied adults. Neither economists nor moral philosophers can suggest a formula that will resolve the conflict: no such formulas exist." Also see Ralph Dahrendorf, The Modern Social Conflict: An Essay on Politics and Liberty (London, Weidenfeld and Nicholson, 1988).

3/ For a discussion of some of these arrangements, see Jean-Philippe Platteau, "Traditional systems of social security and hunger insurance: past acheivements and modern challenges" in Ehtisham and others, eds., op cit., pp. 112-170.

## Notes (continued)

4/ For a general discussion of the social security issues in Eastern Europe, see A. McAuley, "The economic transition in Eastern Europe: employment, income distrubiton, and the social security net", Oxford Review of Economic Policy, vol. 7, No. 4 (Winter, 1991), pp. 93-105.

5/ For a general discussion of issues relevant to developed market-economy countries, see ILO, Into the Twenty-First Century: The Development of Social Security (Geneva, 1986); and R. Titmuss, "The social division of welfare", in Essays on the Welfare State, R. Titmuss, ed., (London, Allen and Unwin, 1958).

6/ See Lindbeck, op cit., pp. 22-23.

7/ See Amartya Sen, "The political economy of targeting", prepared for the World Bank Conference on Public Expenditure and the Poor: Incidence and Targeting, 17-19 June 1992, Washington, D.C.

8/ OECD, The Future of Social Protection, OECD Social Policy Studies No. 6 (Paris, 1988), table 3.

9/ See OECD, Social Expenditure, 1960-1990: Problems of Growth and Control, OECD Social Policy Studies No. 1 (Paris, 1985).

10/ See, for example, W. Beckerman and S. Clark, Poverty and Social Security in Britain since 1961 (Oxford, Oxford University Press, 1982); and S. Danziger and D. Weinberg, eds., Fighting Poverty: What Works and What Doesn't (Cambridge, Harvard University Press, 1986).

11/ OECD, Reforming Public Pensions, OECD Social Policy Studies No. 5 (Paris, 1988), table 4.4.

12/ Ibid., tables 7.1 and 7.4.

13/ In real terms, all transfers are made from current income. In financial terms, some schemes may be fully or partially funded. In those instances, a retiree is paid out of reserves built up through the contributions made to a pension fund by him and his employer over the course of the retiree's working years, together with earnings from the investment of such funds.

14/ See P. Heller, R. Hemming and P. Kohnert, Aging and Social Expenditure in the Major Industrial Countries, 1980-2025, IMF Occasional Paper No. 47 (Washington, D.C., International Monetary Fund, 1986), table 20.

15/ For a brief account of changes in social security provisions in developed and developing countries during the past two decades, see J. P. Dumont, "The evolution of social security during the recession", International Labour Review, vol. 120, No. 1 (Jan.-Feb. 1987), pp. 1-19.

16/ For details, see Government of the United Kingdom, Reform of Social Security: Programme for Action (London, HM Stationery Office, 1985).

## Notes (continued)

17/ For a discussion of those long-term approaches, see R. Hauser, "How to guarantee West German public pension payments during the next fifty years?", Journal of Institutional and Theoretical Economics, vol. 138 (1982), pp. 440-468.

18/ In the United States, more than a quarter of total Medicare spending is on enrollees in the last year of their life, even though such enrollees constitute 5 per cent of the enrolled population. See United States Council of Economic Advisers, "Health status and medical care", Economic Report of the President (Washington, D.C., Government Printing Office, 1985), pp. 129-186. For additional information on ageing and morbidity, see, for example, K. Manton, "Changing concepts of morbidity and mortality in the elderly population", Milbank Memorial Fund Quarterly/Health and Society, vol. 60 (1982), pp. 183-244; and D. Rice and J. Feldman, "Living longer in the United States: demographic changes and health needs of the elderly", Milbank Memorial Fund Quarterly/Health and Society, vol. 61 (1983), pp. 362-396.

19/ See OECD, The Challenge of Unemployment (Paris, 1982), p. 19.

20/ See Heller, Hemming and Kohnert, op. cit., p. 53; and ILO, World Labour Report 1 (Geneva, 1984), p. 155.

21/ OECD, Ageing Populations: The Social Policy Implications, (Paris, 1988).

22/ For a comprehensive review of lone-parent families, see OECD, Lone-Parent Families: The Economic Challenge, OECD Social Policy Studies No. 8 (Paris, 1990).

23/ This account is based on Judith M. Gueron, "Work and Welfare: lessons on employment programmes", Journal of Economic Perspectives, vol. 4, No. 1 (Winter, 1990), pp. 79-98.

24/ Well-functioning capital markets allow individuals to borrow in difficult circumstances and to save for their retirement; insurance markets help protect individuals from the need to borrow as a result of difficult circumstances, while minimizing moral hazard and adverse selection instances; and labour markets and the process of wage determination are the main determinants of income for most individuals. In the case of social insurance, for instance, Lord Beveridge argued that State intervention was "justified in terms of the failure of private insurance markets to provide adequate cover for the relevant risks as a result of adverse selection and moral hazard problems. Where insurance companies cannot identify the riskiness of individual customers, and there are problems of adverse selection, the private market for insurance is unlikely to be perfectly competitive". See W. Beveridge, Social Insurance and Allied Services, Cmd. 6404 (London, HM Stationery Office, 1942), p. 286. In many developing countries, insurance markets are poorly developed. See R. Burgess and N. Stern, "Social security in developing countries: what, why, who and how?" and A. Atkinson and J. Hills, "Social security in developed countries: are there lessons for developing countries?", in Ehtisham and others, eds., op. cit., pp. 48-53 and p. 105.

## Notes (continued)

25/ For an extended analysis, see J. Midgley, Social Security, Inequality, and the Third World (Chichester, John Wiley, 1984).

26/ See Ha-Cheong Yeon, "Intra-generational security in Asian countries", Asian Development Review, vol. 8, No. 1 (1990), pp. 71-89.

27/ See J. V. Gruat, "Social security schemes in Africa: current trends and problems", International Labour Review, vol. 129, No. 4 (1990), table 2.

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30/ See ILO, L'investissement des fonds de la securite sociale dans les pays en developpement (Geneva, 1987).

31/ See Lim Chong-Yah and Tay Boon-Nga, "Shelter for the poor: housing policy in Singapore", Asian Development Review, vol. 8, No. 1 (1990).

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33/ See H. Perez Montas, "Problems and perspectives in the financing of social security in Latin America", International Social Security Review, No. 1 (1983), p. 72.

34/ For the case of Africa, see T. Nkanagu, "African experience in sickness insurance and health protection under social security", International Social Security Review, No. 2 (1985), pp. 119-140. For the case of Latin America, see L. Asis Beirute, "Trends, policies and strategies in medical care provision in Latin America", International Social Security Review, No. 4 (1988), pp. 409-432.

35/ See Beirute, loc. cit., pp. 422-424. For more information on health care security provided to the rural poor in Mexico, see Mexican Social Insurance Institute, "The National IMSS/COPLAMAR Programme of Social Solidarity through Community Co-operation: a programme of care for rural marginal groups in Mexico", International Social Security Review, No. 1 (1985), pp. 62-74. For details on social security in rural areas of Argentina, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, Guatemala, Mexico and Venezuela, see Asociacion Internacional de la Seguridad Social, La Proteccion Social Rural, Grupo de Trabajo Regional Americano sobre la Proteccion Social de la Poblacion Rural (Buenos Aires, 1991).

36/ See P. Mouton and J. V. Gruat, "The extension of social security to self-employed persons in Africa", International Social Security Review, No. 1 (1988), pp. 40-54.

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38/ See, for example, the summaries of papers on Bangladesh, China, Fiji, India, Indonesia, Jordan, Republic of Korea, Kuwait, Malaysia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Sri Lanka and Thailand presented at the ILO Asian Regional Seminar on Social Security Insurance and Its Role in Health for All Strategies (Seoul, March 1989), in A. Ron, B. Abel-Smith, and G. Tamburi, Health Insurance in Developing Countries: The Social Security Approach (Geneva, ILO, 1990), pp. 87-199.

39/ For details, see R. Tibaudin, "Social security for self-employed workers in Latin America", International Social Security Review, No. 4 (1985), pp. 396-417. As for Sri Lanka, see "Sri Lanka: institution of an agricultural social security scheme", International Social Security Review, No. 3 (1987), p. 302.

40/ See C. Mesa-Lago, La Seguridad Social y el Sector Informal, Investigaciones sobre Empleo No. 32, (Santiago, Regional Employment Programme for Latin America and the Caribbean, 1990).

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42/ See J. Martinez, "Efectos sociales de la crisis economica: Chile, 1980-1985" (LC/R.519, October 1986).

43/ See J. Drèze and A. Sen, Hunger and Public Action (Oxford, Clarendon Press, 1989), chap. 8.

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46/ See Daniel C. Hardy, "Soft budget constraints, firm commitments and the social safety nets", IMF Staff Papers, vol. 39, No. 2 (June 1992), pp. 310-329.

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48/ M. Zam, "Economic reforms and safety nets in Hungary: limits to protection" in Cornia and Sipos, eds., op. cit., p. 194.

49/ B. Milanovic, "Distributional incidence of cash and in-kind transfers in Eastern Europe and Russia", paper prepared for the World Bank Conference on Public Expenditures and the Poor: Incidence and Targeting, 17-19 June 1992, Washington, D.C., p. 15.

50/ Ibid., p. 12.

51/ Igor Tomes, "Social reform: a cornerstone in Czechoslovakia's new economic structure", International Labour Review, vol. 130, No. 2 (1991), p. 194.

52/ Government of Poland, Raport o stanie panstwa rzadu J. K. Bieleckiego, (Report on the state of the nation under the Government of J. K. Bieleckiego) (Warsaw, 1992), p. 83.

53/ A. McAuley, "The economic transition in Eastern Europe: employment, income distribution and the social security net" Oxford Review of Economic Policy, vol. 7, No. 4 (1991), pp. 100-101.

54/ Includes subsidies to consumers as well as enterprises.

55/ "Pensionery budut nischimi do teh por, poka zabotits'ay o nih budet tol'ko gosudarstvo" (Pensioners doomed to be paupers until the State remains the only provider), Izvestivya, 29 January 1992; "Starikam Rossii beretsya pomoch Strahovoy pensionny fond" (The Insurance Pension Fund will take care of the Russia's elderly), Izvestiya, 18 May 1992.

56/ Social and Labour Bulletin, Nos. 3-4 (Sept.-Dec. 1991), p. 338.

57/ OECD, Poland 1992, OECD Economic Surveys (Paris 1992), pp. 75-76.

58/ See "Social policies in the transition to a market economy", report of a mission to the Russian Federation organized by the United Nations, January 1992 (Edinburgh, David Hume Institute, 1992).

59/ See E. V. K. FitzGerald, "Economic reform and citizen entitlements in Eastern Europe: some social implications of structural adjustment in semi-industrial economies", Discussion Paper No. 27 (Geneva, UNRISD, June 1991).

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60/ See G. A. Cornia and F. Stewart, "Two errors of targeting", paper presented at the World Bank Conference on Public Expenditures and the Poor: Incidence and Targeting, 17-19 June 1992, Washington, D. C.

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# Chapter XII

## ETHNIC CONFLICTS AND NATIONAL DISINTEGRATION

There has been a great escalation of violent conflict in the world since the end of the cold war - in the former Union of Soviet Socialist Republics, in Eastern Europe and in Asia and Africa. In the period 1989-1990, there were 33 armed conflicts with more than 1,000 casualties (table XII.1). Only one of those conflicts was fought between nation States. The rest were all civil wars - conflicts between ethnic, religious or other groups in one and the same nation State. 1/

The casualties in these conflicts have been very high. In India during 1989-1991, the number of people killed in ethnic conflicts was reported as 12,261. 2/ In the former Yugoslavia, the number of people killed in recent ethnic and religious conflicts up to mid-1992 was close to 6,000. Millions of people have had their livelihoods and homes destroyed and been driven forth as refugees or displaced persons (see chap. I).

The conflicts are destroying conditions necessary for economic and social development and siphoning off resources from the urgent tasks of feeding, educating and housing desperately poor populations. Ethnic strife in Somalia and the former Yugoslavia has prevented humanitarian assistance reaching people in desperate conditions of hunger, sickness and homelessness. At the end of 1992, there were more than 2 million refugees and displaced persons fleeing from the former Yugoslavia. In many instances, the cohesion of States is being threatened by brutal ethnic, religious, social, cultural and linguistic strife. 3/ In the wake of the cold war, these local conflicts have emerged as the most common or imminent threats to peace.

## Table XII.1. Parties to major armed conflicts in the world, 1990

| Country or area and Year formed/ year joined a/ | Warring parties b/ | Casualties c/ (Including 1990) |
|---|---|---|
| Africa | | |
| Angola | | |
| 1975/1975 | Government versus National Union for the Total Independence of Angola (UNITA) | 1975-1989: 25,600 d/ |
| 1975/1975 | Government versus Liberation Front for Cabinda (FLEC) | |
| 1975/1975 | Government versus National Front for the Liberation of Angola (FNLA) | |
| Chad | | |
| 1982/1987 | Government versus Islamic Legion | |
| 1989/1989 | Government versus Mouvement patriotique du salut | |
| 1973/1979 | Government versus Government of Libya (Aozou Strip) | |
| Ethiopia | | |
| 1970/1971 | Government versus Ethiopian People's Liberation Front (EPLF) | 1962-1990: 500,000 e/ |
| 1976/1976 | Government versus Tigray People's Liberation Front (TPLF) | |
| 1975/1980 | Government versus Ethiopian People's Democratic Movement | |
| 1977/1977 | Government versus Oromo Liberation Front (OLF) | |
| 1974/1975 | Government versus Ethiopian People's Revolutionary Party (EPRP) | |
| 1975/1975 | Government versus Afar Liberation Front (ALF) | |
| Liberia | | |
| 1989/1989 | Government versus National Patriotic Forces (NPLF) | 1989-1990: 10,000-13,000 |
| 1990/1990 | Government versus Independent National Patriotic Forces (INPLF) | |
| 1990/1990 | Government versus Economic Community of West African States (ECOWAS) Monitoring Group (ECOMOG) | |
| 1990/1990 | Government versus Government of Burkina Faso | |
| Morocco | | |
| 1975/1976 | Government versus Polisario | 1975-1989: 10,000-13,000 f/ |
| Mozambique | | |
| 1975/1976 | Government versus National Resistance Movement | 100,000 (civilians) g/ |

## Table XII.1 (continued)

| Country or area and Year formed/ year joined a/ | Warring parties b/ | Casualties c/ (Including 1990) |
|---|---|---|
| Somalia | | |
| 1981/1981 | Government versus Somali National Movement (SNM) | 1981-1990: 50,000-60,000 |
| 1989/1989 | Government versus Somali Patriotic Movement (SPM) | |
| .. /1990 | Government versus United Somali Congress (USC) | |
| South Africa | | |
| 1950/1984 | Government versus African National Congress (ANC) | 1984-1990: over 7,750 h/ |
| 1979/1983 | Government versus Inkatha versus ANC | |
| 1990/1990 | Government versus white rightist groups | |
| Sudan | | |
| 1980/1983 | Government versus Sudanese People's Liberation Army | 1983-1990: over 33,000 (military) |
| 1990/1990 | Government versus military factions | |
| Uganda | | |
| 1986/1986 | Government versus Uganda People's Democratic Movement (UPD) | 1986-1990: over 11,000 (military) |
| 1987/1987 | Government versus Uganda People's Army (UPA) | |
| 1987/1987 | Government versus United Democratic Christian Movement (UDCM) | |
| South Asia | | |
| Afghanistan | | |
| 1978/1978 | Government versus Mujahidin in Afghanistan, Islamic Republic of Iran, Pakistan | 1978-1990: 1,000,000 i/ |
| Bangladesh | | |
| 1971/1982 | Government versus Parbattya Chattagram, Jana Sanghati Samiti (JSS), Shanti Bahini (SB) | 1975-1990: 1,200-3,000 |
| India | | |
| 1947/1981 | Government versus Khalistan Commando Force | 1983-1990: over 19,800 |
| 1947/1982 | Government versus Jammu and Kashmir Liberation Front | |
| 1990/1990 | Government versus Hizbul Mujahidin | |
| 1988/1988 | Government versus Bodo Student Union/ Bodo Voulantiers Force | |
| 1967/1967 | Government versus Naxalites, People's War Group | |

## Table XII.1 (continued)

| Country or area and Year formed/ year joined a/ | Warring parties b/ | Casualties c/ (Including 1990) |
|---|---|---|
| Myanmar | | |
| 1948/1949 | Government versus Karen National Union | 1948-1951: 8,000<br>1950: 5,000 |
| 1948/1948 | Government versus Kachin Independence Army | 1981-1984: 400-600 yearly |
| 1949/1949 | Government versus Mon State Party | 1985-1987: over 1,000 yearly |
| 1965/1965 | Government versus Shan State Army | 1988: 500-3,000 |
| 1989/1989 | Government versus Burma National United Party | |
| 1989/1989 | Government versus Noom Suk Harn | |
| 1989/1989 | Government versus National Democratic Army | |
| Sri Lanka | | |
| 1976/1983 | Government versus Liberation Tigers of Tamil Eelam | |
| 1969/1987 | Government versus People's Liberation Front (JVP) | |
| Pacific Asia | | |
| Cambodia | | |
| 1975/1979 | Government versus Democratic Kampuchea (Khmer Rouge) | 1979-1989: 25,300 j/ |
| 1979/1979 | Government versus Khmer People's National Liberation Front (KPLNF) | |
| 1979/1979 | Government versus Front Uni pour un Cambodge Indépendent, Neutre, Pacifique et Coopératif/Armée Nationale Sihanoukiste (FUNCINPEC/ANS) | |
| Indonesia | | |
| 1975/1975 | Government versus Revolutionary Front for an Independent East Timor (Fretilin) | 1975-1990: 15,000-16,000 (military) k/ |
| .. /1989 | Government versus Aceh Merdeka | |
| .. /1989 | Government versus National Liberation Front of Aceh | |
| Lao People's Democratic Republic | | |
| 1975/1975 | Government versus ULNLF (1980) and other | 1975-1990: over 1,000 l/ |
| Philippines | | |
| 1968/1986 | Government versus New People's Army | 1972-1990: over 37,500 m/ |
| 1982/1986 | Government versus Reform Army Movement | |
| 1972/1986 | Government versus Mindanao National Liberation Front | |
| 1990/1990 | Government versus military faction | |

Table XII.1 (continued)

| Country or area and Year formed/ year joined a/ | Warring parties b/ | Casualties c/ (Including 1990) |
|---|---|---|
| Central and South America | | |
| Colombia | | |
| 1949/1978 | Government versus Fuerzas Armadas Revolucionarias de Colombia | 1980-1990: over 8,500 n/ |
| 1965/1978 | Government versus Ejército de Liberacion Nacional (ELN) | |
| 1968/1977 | Government versus Ejército Popular de Liberacion (EPL) | |
| El Salvador | | |
| 1976/1979 | Government versus Farabundo Marti Front for National Liberation (FMLN) | 1979-1990: 76,000 |
| Guatemala | | |
| 1967/1968 | Government versus Guatemalan National Revolutionary Unity | 1962-1990: 20,000-60,000 |
| Nicaragua | | |
| 1981/1981 | Government versus Contras | 1981-1990: over 30,000 (military) |
| Peru | | |
| 1980/1981 | Government versus Sendero Luminoso | 1981-1990: 11,500-20,000 |
| 1984/1986 | Government versus Movimiento Revolucionario Tupac Amaru (MRTA) | |
| Middle East | | |
| Iran (Islamic Republic of) | | |
| 1972/1979 | Government versus Kurdish Democratic Party of Iran | 1979-1990: over 17,000 g/ |
| Iraq | | |
| 1961/1980 | Government versus Kurdish Democratic Party | 1980-1989: 5,000-6,000 g/ |
| 1975/1980 | Government versus Patriotic Union of Kurdistan | |
| Israel/Palestine | | |
| 1964/1964 | Government of Israel versus Palestine Liberation Organization (PLO) groups or related groups | 1948-1990: over 11,000<br>December 1987-December 1990: 900-1,000 |

Table XII.1 (continued)

| Country or area and Year formed/ year joined a/ | Warring parties b/ | Casualties c/ (Including 1990) |
|---|---|---|
| Lebanon | | |
| | Government (Hrawi/Hoss)/National Army of Lebanon | 1975-1990: 150,000 |
| 1975/1975 | Lebanon Army (Aoun) | |
| 1985/1985 | Lebanese Forces (Gaegea) | |
| 1979/1979 | Amal | |
| 1975/1975 | Islamic Resistance/Hezbollah | |
| 1964/1964 | Palestine Liberation Organization (PLO) | |
| 1959/1965 | Al Fatah | |
| 1969/1969 | Democratic Front for the Liberation of Palestine (Hawatmah) | |
| 1967/1968 | Popular Front for the Liberation of Palestine (Habash) | |
| 1968/1968 | Popular Front for the Liberation of Palestine-General Command | |
| 1968/1975 | Palestine Populist Struggle Front Lebanese Forces | |
| 1974/1976 | Fatah Revolutionary Council (Nidal) | |
| 1977/1977 | Palestine Liberation Front (Yaqoub) | |
| 1961/1975 | Syrian Socialist Nationalist Party | |
| 1975/1975 | Lebanese National Resistance Front | |
| 1975/1975 | Popular Nasserite Organization | |
| 1975/1975 | Lebanese Baath Party | |
| 1978/1978 | South Lebanese Army | |
| 1976/1976 | Government of Syrian Arab Republic | |
| 1978/1982 | Government of Israel | |
| Turkey | | |
| 1974/1984 | Government versus Kurdish Workers' Party | 1984-1990: 2,000-2,500 |
| Europe | | |
| United Kingdom of Great Britain and Northern Ireland | | |
| 1969/1969 | Government versus Irish Republican Army (IRA) | 1969-1990: 2,800 |

Source: Stockholm International Peace Research Institute (SIPRI), World Armaments and Disarmament Yearbook, 1991.

Note: Two dots (..) indicate that year of formation of a conflict is unknown.

(Footnotes on following page)

(Footnotes to table XII.1)

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a/ Year formed is the year in which the two or more warring parties last formed their conflicting policies or the year in which a new party, State or alliance involved in the conflict came into being. Year joined is the year in which the armed fighting last began or the year in which armed fighting recommenced after a period for which no armed combat was recorded. For conflicts with very sporadic armed combat over a long period, year joined may also refer to the beginning of a period of sustained and exceptionally heavy combat.

b/ In the list of warring parties for each conflict, note that one side is always a Government. The non-governmental warring parties are listed by the name of the organization conducting armed operations. Only those parties that were active during 1990 are listed in this column.

c/ The figures for deaths refer to total battle-related deaths during the conflict. The figures exclude, as far as data allow, civilian deaths owing to famine and disease. Military and civilian refer to estimates, where available, of military and civilian deaths; where there is no such indication, the figure refers to total military and civilian battle-related deaths in the period or year given.

d/ Figures refer to the period up to 1989. During January-October 1990, the Government and UNITA claimed to have killed over 1,800 of each other's soldiers, but each admitted only to having incurred small losses. According to the Government, UNITA in addition killed 1,720 civilians during the same period.

e/ The 500,000 deaths refer to the Eritrean conflict and include both military and civilian deaths. It is unclear whether the figure includes all deaths in connection with the conflict (in other words, not only battle-related deaths).

f/ Figures for the period up to 1989. Military activity during 1990 was low.

g/ Figures are for the period up to 1989, since figures are not available for 1990.

h/ Including deaths connected with the struggle between ANC and Inkatha supporters.

i/ The figure is likely to include all deaths in connection with the conflict, that is, not only battle-related deaths. According to Soviet sources, the total number of Soviet troops killed in the period 1979-15 February 1989 was 15,000. Figures for the total number of deaths during 1990 are not available.

(Footnotes to table XII.1) (continued)

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j/ For figures for battle-related deaths in this conflict before 1979, see SIPRI Yearbook, 1990. Regarding battle-related deaths during 1979-1989, the only figure available is from official Vietnamese sources, indicating that 25,300 Vietnamese soldiers died in Cambodia. An estimated figure for the period 1979-1989, based on various sources, is over 50,000, and for 1989, over 1,000. Figures for 1990 are not available.

k/ The 15,000-16,000 military deaths refer to the East Timor conflict. No reports are available for the number of deaths in East Timor during 1990.

l/ This currently low-level conflict has since 1975 produced over 1,000 battle-related deaths. Higher figures have been reported, but there is no agreement regarding their accuracy.

m/ Not including casualties from the Mindanao conflict.

n/ Politics-related deaths (that is, excluding deaths resulting from fighting between Government and cocaine cartels). The figure does not include October-December 1990.

o/ Including the 2,000 NLA (Iranian National Liberation Army) deaths (in 1988) in the war between Iran and Iraq.

## A. Ethnic and religious diversity of nation States

Most nation States contain more than one ethnic or religious group. In the old nation States of Europe, the sharp differences among ethnic groups have for the most part melted away in the course of nation-building and economic development which moved and mixed people, promoted a common language and culture, stimulated intermarriage and created an industrial society with new social classes having a strong interest in national stability. Even in those States, however, bitter language feuds continue (in Belgium, for example), and old feuds survive in various forms as is attested by the fierce terrorism of the Irish Republican Army (IRA) in Northern Ireland and in the rest of the United Kingdom of Great Britain and Northern Ireland the debate about devolution in Scotland and the ethnic claims of marginal communities, such as the Basques in Spain and the Tyroleans in Italy. Recently, the arrival in these countries of new immigrants from far different cultural backgrounds has engendered fears of ethnic conflict.

The most spectacular case of a multi-ethnic nation State is the United States of America, where waves of immigration have created a dynamic web of semi-integrated communities. Although the scars left by the oppression of the original Indian population and the enslavement of transplanted Africans still mark the political life of the nation its integrity is not in doubt.

In other parts of the world, there are some nation States such as China and Japan that are relatively homogeneous in ethnic composition. Brazil, although more diverse, has also succeeded in merging its several groups into thriving communities. The newer nation States are generally much more diverse and have not yet had the benefit of experiencing those forces that tend to reduce the sharpness of ethnic differences. A full survey of ethnic conflicts in nation States will not be attempted here, but some of the situations currently claiming the attention of the world community will be briefly reviewed. (The objective is not to provide a historical account and some will be described in more detail than others, primarily to illustrate the dynamics of such conflicts.)

### -. Africa

Africa presents by far the most varied and complex ethnic diversity of all continents. Virtually all the States of Africa contain a large number of ethnically distinct communities, tribes or language groups, and ethnicity is also an important factor in African society. The variety of ethnic diversity is illustrated in table XII.2, where data for a sample of sub-Saharan countries are presented. The list is not complete but the overall dimension of ethnic pluralism in Africa is evident. Ethnically homogeneous countries include Lesotho, Somalia and Swaziland. In Africa, ethnicity is often a key factor determining affiliation in political parties, and participation in public office, the army or trade unions. Many ethnically diverse States, such as Ghana, Namibia and the United Republic of Tanzania, are thriving communities where ethnicity is not a disrupting factor.

Conflict among ethnic groups has been reflected in recurrent civil, border and secessionary wars, and the tendency of political divisions to take on an ethnic dimension. Civil strife and internal insecurity have been a main

Table XII.2. Major ethnic groups in some countries of sub-Saharan Africa

| Country | Ethnic group | Population of ethnic group (thousands) | Relative importance of ethnic group (percentage of total population) |
|---|---|---|---|
| Angola | Ovimbundu | 2 900 | 35.0 |
| | Bakongo | 1 200 | 14.0 |
| Botswana | San | 35 | 4.0 |
| Burundi | Hutu | 3 500 | 84.0 |
| Cameroon | Kirdi | 900 | 15.0 |
| Chad | Southerners | 2 850 | 56.0 |
| | Northerners | 2 250 | 44.0 |
| Congo | Lari (Bakongo) | 400 | 21.0 |
| Ethiopia | Oromo | 14 000 | 37.0 |
| | Tigreans | 5 250 | 14.0 |
| | Eritreans | 2 500 | 7.0 |
| | Somalis | 1 700 | 5.0 |
| | Nilo-Saharans | 750 | 3.0 |
| Ghana | Mossi-Dagomba | 2 400 | 20.0 |
| | Ashanti | 2 100 | 17.0 |
| | Ewe | 1 500 | 13.0 |
| Guinea | Fulani | 1 600 | 28.0 |
| | Malinke | 1 500 | 25.0 |
| Kenya | Kikuyu | 3 203 | 21.2 |
| | Luo | 1 956 | 12.9 |
| | Somali | 383 | 2.5 |
| | Maasai | 241 | 1.6 |
| | Turkana | 207 | 1.4 |
| | Asians | 104 | 0.7 |
| | Europeans | 40 | 0.3 |
| Liberia | Americo-Liberians | 60 | 2.5 |
| | Krahn | 115 | 5.0 |
| Madagascar | Asians | 10 | 0.1 |
| | Merina | 2 600 | 25.0 |
| Mali | Tuareg | 400 | 5.0 |
| Mauritania | Kewri (Blacks) | 340 | 20.0 |
| Namibia | Europeans | 75 | 6.6 |
| Niger | Djerema-Songhai | 1 340 | 20.0 |
| | Hausa | 3 000 | 54.0 |
| | Tuareg | 670 | 10.0 |
| Nigeria | Hausa-Fulani | 31 000 | 29.0 |
| | Ibo | 18 000 | 17.0 |
| | Yoruba | 21 000 | 20.0 |
| Rwanda | Tutsi | 430 | 9.0 |
| Senegal | Dida | 630 | 9.0 |
| Sierra Leone | Creoles | 120 | 3.0 |
| | Mende | 1 440 | 36.0 |

Table XII.2 (continued)

| Country | Ethnic group | Population of ethnic group (thousands) | Relative importance of ethnic group (percentage of total population) |
|---|---|---|---|
| South Africa | Blacks | 22 375 | 73.8 |
| | Whites | 4 528 | 14.9 |
| | Coloureds | 2 613 | 8.6 |
| | Asians | 821 | 2.7 |
| Sudan | Southerners | 5 271 | 25.7 |
| Togo | Ewe | 1 370 | 44.0 |
| | Kabre | 720 | 23.0 |
| Uganda | Buganda | 3 700 | 29.0 |
| | Ankole | 1 000 | 8.0 |
| | Lingo | 760 | 6.0 |
| | Toro | 630 | 5.0 |
| | Acholi | 500 | 4.0 |
| | Lugbara | 460 | 3.6 |
| | Bunyoro | 370 | 2.9 |
| | Anba/Kanjo | 280 | 2.2 |
| | Karamajong | 260 | 2.0 |
| | Madi | 160 | 1.2 |
| | Kakwa | | >.1 |
| Zaire | Bakongo | 3 100 | 10.0 |
| | Lingala | 6 900 | 22.0 |
| | Luba-Kasai | 1 900 | 6.0 |
| | Lunda/Yeke | 2 000 | 6.3 |
| Zambia | Bemba | 1 000 | 15.0 |
| | Tonga | 800 | 12.0 |
| | Lozi (Barotse) | 200 | 3.0 |
| Zimbabwe | Ndebele | 1 300 | 17.0 |
| | Europeans | 170 | 2.2 |

Source: Human Rights Quarterly, vol. 11, No. 3 (August 1989).

obstacle to progress in Angola, Chad, Ethiopia, Mozambique, Somalia and the Sudan for many years. The 36-year-old civil war in the Sudan between the Muslim north and the Christian south has been a main obstacle to growth and development. More recently, armed struggle among ethnic groups has affected Djibouti, Liberia, Mali, Rwanda, Sierra Leone and Zaire. This situation is not new. During the period 1960-1976, after the granting of independence to many countries, 21 internal and border wars of major proportions were fought in Africa. In the 1980s 10 more were added to the list, which continues to grow owing to new conflicts in the 1990s.

The drawn-out ethnic conflicts in Burundi and Rwanda involve groups that live in several nation States. 4/ Some of those groups live in Uganda, the United Republic of Tanzania and Zaire as well as in States in the Great Lakes region. The ethnic groups in Rwanda consist of the Twa, a small pygmy population; the Hutu, constituting 85 per cent of the population; and the Tutsi, constituting 15 per cent of the population. The Government of Rwanda came to be controlled by the Hutu and many Tutsi after some 10,000 had been either massacred or escaped to Burundi, Uganda and other neighbouring countries. The Tutsi organized themselves into the Front patriotique rwandais. A major invasion was attempted in October 1990. The five Governments of Burundi, Rwanda, Uganda, the United Republic of Tanzania and Zaire agreed in February 1991 to end the conflict and find solutions to the problem of the Rwandan refugees.

In Burundi, the Tutsi, although comprising a minority of the population, hold government power. Fifteen provincial governors, 2,000 students out of a total of 3,000 in the University of Bujumbura, most army officers and 7 out of 9 Catholic bishops are Tutsi. In 1972 an attempt was made by the Hutu population to gain control of the Government, but this was unsuccessful and led to an estimated 100,000 casualties among the Hutu population. Initiatives have recently been undertaken to open up opportunities in a more equitable manner and to introduce multi-party democracy. However, despite initiatives for the creation of an Economic Community of the Great Lakes Countries (CEPGL), 5/ ethnic conflict remains a prominent feature of social and political life in these countries.

Nigeria is estimated to have about 250 identifiable ethnic groups. 6/ The Edo, Hausa-Fulani, Ibibio, Ibo, Ijaw, Kanuri, Nupe, Tiv and Yoruba constitute almost 80 per cent of the population. 7/ The population is also diverse in terms of religious beliefs. Muslims constitute more than 50 per cent of the population and Christians about 35 per cent; the rest of the population follow traditional religious practices. 8/

Each distinct ethnic group was governed as a separate administrative unit under British indirect rule. The Act of Amalgamation, passed in 1914, was the first step towards the creation of modern Nigeria. The next step towards integration was the Richards' Constitution of 1946 which established a Federation of three regions - east, north and west - and the Federal Territory of Lagos. The three regions coincided with the country's three dominant ethnic groups - the Hausa-Fulani in the north, the Ibo in the east and the Yoruba in the west. When Nigeria became independent on 1 October 1960, this federal structure was retained in recognition of the regional diversity of the country.

Ethnically based cultural organizations became the stepping-stones towards political parties. The National Convention of Nigerian Citizens (NCNC), established in 1944, derived its main support from the Ibo State Union, and the Action Group (AG), founded in 1951, from the Egbe Omo Oduduwa. In northern Nigeria, the Northern Peoples Congress (NPC), established in 1949, served as both a cultural and a political organization. 9/ The Northern Region contained 54 per cent of the population and covered two thirds of the surface area. In the first elections in independent Nigeria, 174 seats out of 312 in the Congress were allotted to that Region, and NPC could form the central Government without other support. The extreme manifestation of regionalism was the threat of secession. In July 1967, the Eastern Region's proclaiming itself the Republic of Biafra started a civil war that lasted till January 1970. During the crisis of 1966, thousands of Nigerians were exposed to violence because of their ethnic origin. About 300,000 Ibos were forced to leave their homes in the north to return to the Eastern Region. 10/ In the aftermath of the civil war, the victorious federal authorities showed great statesmanship and sought to build a reunited and more just federation.

Another aspect of Nigeria's diversity is reflected in the mounting strain along the religious divide. The inclusion of the shariah (Islamic law) into the constitution in 1988 became the object of strong controversy. The last decade has seen Muslim-Christian violence occurring over many other ostensibly innocuous issues. 11/ The most recent Muslim-Christian riots took place in April/May 1991 at Bauchi and in October 1991 at Kano. 12/

One approach to the political problem has been to successively increase the number of constituent States in the federal structure to permit each large ethnic group to gain control of the State apparatus governing it. 13/ With the creation of more States, minorities also gained direct access to power in the federation. 14/ The successful completion of a national census in 1991, which had not been feasible earlier because of ethnic rivalries, and the peaceful election of governors and State legislators on 15 December 1991, augur well for the future.

The national rail network moving people and goods throughout the nation has been a powerful force for unity. 15/ The freedom of movement permitted by a united Nigeria has prompted people to move in search of economic opportunities, and this has resulted in the geographical mixing of ethnic groups. With a total labour force of 37 million and unemployment at 3-5 million (figures for 1986), one of the main focuses of the processes of national integration will concern the success with which people find work irrespective of their ethnic origin. The set-backs to Nigeria's economic and social development during the 1980s has seriously limited this prospect.

Uganda has 28 different ethnic groups. The northern Nilotic pastoral tribes and southern Bantu farming groups each have a different history, language and traditions. These differences have been exacerbated by religious differences among Christians (both Roman Catholic and Protestant), Moslems and others.

Some of the early political parties, such as the Uganda National Congress (UNC), formed in 1952, sought inter-ethnic integration. 16/ However, there soon emerged other political parties, such as the Kabaka Yekka (The Kabaka Alone) and the Democratic Party (DP). 17/ In July 1985, dissent between two major ethnic groups - the Langi and the Acholi - came out into the open. Power changed hands several times during the past 28 years, four times through armed conflict. Civil strife affected large numbers of people and set back economic and social progress. Ethnic conflicts were a major factor. Ethnic groups such as the Ganda, Langi, Acholi, Ankole, Kakwa and others challenged national leaders to eliminate discrimination against minority groups. Avoiding violent conflict absorbed the energies of Ugandan society at the expense of dealing with vital problems of social development and economic prosperity. Resources that otherwise would have been available for economic and social development were absorbed in military and police operations. After some 20 years of ethnic conflict and economic decline, high priority is now being given to the objectives of economic and social development.

The most flagrant ethnic divisions exist in South Africa, although the policies of apartheid are now being abolished. The division in Angola between the two warring factions, the National Union for the Total Independence of Angola (UNITA) and the National Front for the Liberation of Angola (FNLA), is not based primarily on ethnic conflict; nevertheless it is supported by such conflict. In the Sudan, the religion, lifestyle and physical features of different ethnic groups define two polarized blocs, in the north and the south. A similar separation can be found in Chad between Arabs and Teda-Daza (called Goranes by the former). This separation has been feeding political rivalry even though both communities share the same Islamic faith.

The Sudan has been the victim of ethnic and religious conflict and civil war almost from the time it gained independence in 1955. The population in the north (about 40 per cent of the total), which considers itself of Arab descent, is mostly Muslim. The population in the south is of Nilotic origin and comprises followers of Christianity and other faiths. The emergence of Islamic fundamentalism has further complicated the situation. The entire population is divided into 19 major ethnic groups and 597 subgroups. Among the Nilotic population, the largest ethnic groups are the Dinka, Nuer and Shillak. The Arab population dominates the political, economic and social life of the country. There are 115 languages and many dialects in each language. The dominant languages are Arabic and Dinka.

War between ethnic groups in the south and the central Government of the Sudan began in 1955. Periodic clashes have been frequent not only in the south but also in the west, among the Nuba Mountains. Conflicts grew in violence in 1983 as the 1984-1985 drought hit particularly hard.

The creation of paramilitary forces each distinct in ethnic composition has created a situation in the western and southern provinces that is almost anarchic. While the main southern military organization is the Sudan People's Liberation Army, a number of armed militia whose membership is exclusively Muslim (the nomadic Rizeigat and Misseriya) are active in the provinces of Kordofan, Darfur and Bahr el Ghazal. Extrajudicial executions by the military on a massive scale have been reported in the south.

The decision in December 1990 to reintroduce shariah laws in the Sudan (they were introduced initially in 1983 and suspended in 1985) was accompanied by the implementation of Islamic penalties as normal procedures of the Sudanese courts.

In contrast, Somalia is united by one language and by one religion, Islam, but divided into a large number of relatively small groups, each one fighting another. There has been no stable government in the country since rebel forces in January 1991 overthrew the Government of President Barré. Military equipment brought into Somalia to be used in fighting its neighbours has fallen into the hands of people in a country without a government.

This collapse of civil society has taken place in a country that fought a war from 1977 to 1987 with the Western Somali Liberation Front and Ethiopia. Two decades of recurring drought have ruined much livestock and many agricultural activities. One third of all livestock were destroyed by disease and drought. The civil war has destroyed irrigation systems and seed stocks, drastically reducing harvests. Some 60 per cent of the physical infrastructure and 80 per cent of social services have been rendered non-operational. Only 15 of 70 hospitals functioned in late 1992 and even they lacked electricity, equipment and medicines.

In 1988, when the civil war erupted, 450,000 Somali nationals became refugees in Ethiopia. Some 300,000 people are estimated to have died of starvation and war since November 1991. Children account for a large proportion of the dead. A further 1 million children are estimated to run the risk of severe malnutrition.

### 2. India

India is a country of immense cultural diversity. As shown in table XII.3, it has adherents of the six major world religions. Indians speak 14 major languages, each with a flourishing literature. Besides these, there is Sanskrit, an ancient language with a rich literature in which Hindu rituals are conducted, and English, which is common among small proportions of all linguistic groups. The Hindu population is also divided into castes.

The federal Constitution provides for a strong central Government and a substantial measure of autonomy for the constituent units, designed to accommodate the existing diversity and guarantee each minority its cultural, religious and linguistic distinctiveness. 18/ The Constitution also contains special provisions for improving economic, cultural and social conditions among castes and tribes listed in a separate schedule.

In order to provide autonomy to a larger number of linguistic and ethnic groups, the number of constituent units in the federation, which in 1956 comprised 14 States and 6 centrally administered Territories, has been increased to comprise, at present, 25 States and 7 centrally administered Territories. A system of local self-government, known as *panchayati raj*, has also been introduced. The progressive division of constituent units has been carried out largely on the basis of language. The State of Bombay was divided into Gujarat and Maharashtra, each with its distinct language, and people of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu each speak a different language. The demand for States of their own by tribal communities in the north-eastern region was satisfied by the creation of Nagaland, Mizoram and Arunachal Pradesh.

Table XII.3. Population of India by language and religion, 1981

| Language | | Religion | |
|---|---|---|---|
| Assamese | 70 525 | Buddhist | 4 719 900 |
| Bengali | 51 503 085 | Christian | 16 174 498 |
| Gujarati | 33 189 039 | Hindu | 549 724 717 |
| Hindi | 264 189 057 | Jain | 3 192 572 |
| Kannada | 26 887 837 | Muslim | 75 571 514 |
| Kashimiri | 3 174 684 | Sikh | 13 078 146 |
| Malayalam | 25 952 966 | Other | 2 766 285 |
| Marathi | 49 624 847 | Unknown | 60 217 |
| Oriya | 22 881 053 | | |
| Punjabi | 18 688 400 | Total | 665 287 849 |
| Sanskrit | 2 946 | | |
| Sindhi | 1 946 278 | | |
| Tamil | 44 730 389 | | |
| Telugu | 54 226 227 | | |
| Urdu | 35 323 282 | | |
| Other | 32 997 234 | | |
| Total | 665 287 849 | | |

Source: Demographic Yearbook, 1988 (United Nations publication, Sales No. E.89.XIII.1), pp. 666 and 676.

Caste had been a major cause of sporadic localized conflict. Legislation against caste distinctions has been in force since 1950. To assist underprivileged castes, a policy of affirmative action was adopted. Under this policy, 22.5 per cent of seats in institutions of higher learning and in public employment were set aside for the members of scheduled castes and tribes. Their economic and social conditions have improved substantially. The proportion of people in scheduled castes and tribes in poverty dropped from 48 per cent in 1977-1978 to 29 per cent in 1991. Adult literacy increased from less than 20 per cent in 1950-1951 to 52 per cent in 1991. The number of students from scheduled castes and tribes rose from 5,700,000 in 1951-1952 to 24,344,000 in 1982-1983. 19/

India's strong democratic traditions enable these social groups to compete for opportunities opened up by economic development. However, there are sections of the rest of the population that see in this process a denial of equal opportunities for all. Widespread protests against the reservations policy broke out in August 1990 in northern India, after a decision by the Government to set aside an additional 27 per cent of jobs in central public services for the backward classes. 20/

Religious conflicts between the Muslim and Hindu populations have been common. There were over 100 million Muslims in India in 1991, more than in any other country except Indonesia and Bangladesh. Muslims in India have had to reconcile their allegiance to a secular, although Hindu-dominated India, with their own religious and cultural traditions. There has recently also been a growing tendency for politicians and political groups to be affected by religious divisions. The Hindu Mahasabha, the Ram Rajya Parishad, the Rashtriya Swayamsevak Sangh (RSS) and the Jan Sangh draw major support from the Hindu population and the Jamaat-E-Islami and the Muslim League from the Muslim population. 21/ Conflicts between religious groups in Jammu and Kashmir, and between separatist groups and the central Government, have been prolonged and destructive. Every Hindu-Muslim disturbance in India causes concern in Pakistan about the safety of Muslims there. This concern and the dispute over Jammu and Kashmir have impeded the development of friendly relations between the two countries.

The long-term dominance of the Indian National Congress produced exceptional conditions conducive to the management of ethnic, religious and caste conflicts. It permitted a high degree of cooperation between the central and state Governments, as most issues involving the central Government and the States were handled inside the Congress. Industrialization has created an integrated national economy. Power and water-supply systems, like the Bhakhra Nangal Dam and the Damodar Valley Scheme, provide services to several ethnic groups. A national system of rail and road transport carries people and goods across the whole of India. Labour migration gives India's major cities a striking ethnic diversity. An all-India cadre of managers in government and in private business draws expertise from every region. The emergence of a national system of mass communication - demonstrating the reach of newspapers, radio, cinema and television - has nurtured the growth of a national consciousness. 22/ In workplaces, government offices and the armed services, members of different ethnic groups function harmoniously. 23/ Rapid economic growth, evident in India during the 1980s, would, were it to continue, provide excellent conditions for the taking root of national integration.

### 3. Latin America and the Caribbean

Although countries of Latin America and the Caribbean contain several ethnic groups, those countries are generally not marked by violent ethnic conflict. To the indigenous population of Amerindians (*indios*) in South America have been added, over the centuries, European colonists and immigrants, and immigrants from Africa, China, India and, most recently, Japan. The offspring of mixed unions among these groups are separately identified as mestizos, born of the union of Amerindians and Europeans; mulattos, born of the union of Africans and Europeans; and zambos, born of the union of Amerindians and Africans. Over the centuries, a process of ethnic integration (*mestizaje*) has been producing mestizo culture, which has served as a cushion for the easing of ethnic tensions and the creation of opportunities for open dialogue among the several groups. More recently, it has been realized that the identity of indigenous people needs to be recognized and nurtured.

The mestizo population and the populations of of European origin form a large cultural majority in Latin America. The assimilation of Spanish traditions to indigenous ones has produced a Ladino culture, which the mestizo population identifies itself with. Some countries, including Argentina, Brazil, Chile, Costa Rica, Uruguay and Venezuela, had favoured the immigration of people of European origin, thereby strengthening the latinity of their cultures and substantially ignoring the *indio* influence. 24/

These processes of ethnic and cultural assimilation have been far from perfect or complete. The extent to which the mestizo population has been assimilated into the Ladino culture varies from place to place. In Peru, for instance, the massive urbanization that has taken place during the last few decades has enabled the gradual access of mestizo populations to Spanish language skills and some access of those populations to creole patterns of consumption. The mestizos are designated as belonging to a cholo subculture. 25/ Both mestizo and *indio* populations belong to that subculture. They are poorer than the elite and far removed from it. The furthest removed are the *indio* populations from the Amazon in Bolivia, Brazil, 26/ Colombia, Ecuador, Peru and Venezuela; they live in cultural isolation from the rest of national society. 27/

In Caribbean countries, ethnic differences, distinguished by colour of skin, have always been important in defining social hierarchies. 28/ Trinidad and Tobago has a highly diverse ethnic composition including Creoles who are descendants of Whites (0.9 per cent), browns (16.3 per cent) and Blacks (40.8 per cent). People of Indian origin, who came to Trinidad and Tobago after the emancipation of the slaves in 1934-1938 to work in the sugar plantations, constitute 41 per cent of the population. By religion, they are Hindu (24.9 per cent), Moslem (5.9 per cent) or Christian (9.7 per cent). There are small minorities of Caribs, and Syrian, Portuguese and Chinese people. Each segment, Creole and Indian, has its own stratification. There are tensions between the two major ethnic groups in several fields of activity, including the political one.

The differences are even more acute in Central American countries. The *miskitos*, an indigenous people of Nicaragua, were forcibly relocated to prevent their being caught between the warring factions, the Sandinistas and the Contras. 29/ Some 22,000 escaped to refugee camps in Honduras. In Nicaragua, the major conflict was between ideologies rather than ethnic groups. 30/ That conflict and natural disasters battered the country for some 20 years beginning in 1970. In the first series of conflicts, which peaked in intensity in 1979, some 35,000 people (1.5 per cent of the total population) died; 80,000-110,000 were wounded; about 150,000 were displaced or made refugees; and some 40,000 were orphaned. In the second series, from 1983 to 1990, some 54,000 died, 16,000 were disabled and 354,000 were driven from their homes. 31/

In Guatemala, half the population are descended directly from the Mayas, and the other half are mainly mestizo; the economic and social division between them is sharp. The *indio* populations enjoy a distinctly lower standard of living and are relatively isolated from the mainstream of the economic, social and political processes. 32/

It is only recently that the sharp dualism involving Ladino and *indio* cultures on the one hand and the "indigenous problématique" on the other has been recognized. Differences are not limited to the narrowly cultural. Access to land and other resources, and to education and health services, the use of indigenous languages in the conduct of official affairs, and self-determination in the management of public affairs at the local level are among the rights claimed by indigenous peoples in Latin America. International recognition of those rights is reflected in the Convention concerning Indigenous and Tribal Peoples in Independent Countries (No. 169), adopted by the International Labour Organisation in 1989, under which the preservation of the cultural identity of indigenous people was emphasized. Consequent to this Convention, an Agreement establishing the Fund for the Development of the Indigenous Peoples of Latin America and the Caribbean 33/ was signed during the Second Ibero-American Summit of Heads of State and Government, which was held in Madrid on 23 and 24 July 1992. On 4 December 1992, the General Assembly adopted, in resolution 47/135, the Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities proclaiming that States should protect the existence and the national or ethnic, cultural, religious and linguistic identity of minorities within their respective territories, and should encourage conditions for the promotion of that identity.

Ethnic diversity in Latin America and the Caribbean region has generally not led to violent confrontation. By establishing a dialogue for the elaboration of policies with the active participation of the several groups concerned, by improving access to employment, education and training, social security and health, and by increasing respect for fundamental rights to freedom, it has been possible to avoid the worst forms of conflict. The peculiarity of the Latin American region consists in tendencies towards the assimilation of diversities in a wider common culture. The validity of that approach has been questioned because it is inimical to preserving the identity and survival of distinct ethnic groups.

### 4. The former Union of Soviet Socialist Republics (USSR)

The Russian empire and the Soviet Union which succeeded it were the results of a long history of expansion of territories in eastern Europe, Siberia, central Asia and the Caucasus and their inclusion within one nation State. Populations of completely different ethnic origin, culture, language, religion and economic development had been brought together under the tsars. 34/ The October revolution inherited this gigantic pluralism, which is only partially reflected in table XII.4. (Other counts identify at least 128 ethnic groups.) 35/

The problem of nationalities was one of the first that the leaders of the Soviet Union had to face after the Russian Revolution and great efforts were devoted to the integration of the republics and the promotion of Russian as a common language. The republics were highly integrated economically. In 1989, more than 60 per cent of the net material product of each of the three Baltic republics was sold in other Soviet republics; among the central Asian republics, this proportion varied from 29 to 50 per cent; and among the three Transcaucasian republics, the proportion was above 52 per cent. The lowest figure (18 per cent), was that for the Russian Federation. 36/ Railways, highways and air traffic all connected the far-flung parts of the USSR to one another. The Administration centralized power at the centre. The Communist Party was itself a strong binding force.

**Table XII.4. Ethnic groups in the former Union of Soviet Socialist Republics, 1989**

| Ethnic group | Thousands | Percentage |
|---|---|---|
| Russians | 143 500 | 51.73 |
| Ukrainians | 43 500 | 15.68 |
| Uzbeks | 14 800 | 5.34 |
| Byelorussians | 9 760 | 3.52 |
| Kazakhs | 7 470 | 2.69 |
| Tatars | 6 600 | 2.38 |
| Azerbaijanis | 6 270 | 2.26 |
| Armenians | 4 580 | 1.65 |
| Georgians | 3 800 | 1.37 |
| Tajiks | 3 450 | 1.24 |
| Moldavians | 3 165 | 1.14 |
| Lithuanians | 2 985 | 1.08 |
| Turkmenians | 2 400 | 0.87 |
| Kirghiz | 2 240 | 0.81 |
| Germans | 2 000 | 0.72 |
| Chuvash | 1 790 | 0.65 |
| Jews | 1 750 | 0.63 |
| Bashkirs | 1 470 | 0.53 |
| Latvians | 1 445 | 0.52 |
| Mordvinians | 1 140 | 0.41 |
| Poles | 1 140 | 0.41 |
| Estonians | 1 030 | 0.37 |
| Other peoples | 11 115 | 4.00 |

Source: Peoples of the World, a historical and ethnographic reference book (Moscow, Nauka, 1988), p. 543.

Yet, ethnic animosities came out into the open during the last few years of the Soviet Union. When the central Government replaced local cadres with officials from the centre in 1986, there were strong negative reactions in Kazakhstan, the Transcaucasian republics and the Baltic republics. The protest by Kazakhs in Alma Ata against the purge of local cadres (December 1986), the exacerbation of ethnic conflicts in Armenia and Azerbaijan, and of those between Abkhazes and Georgians, and the violence perpetrated in the central Asian republics against Russian immigrants were all signs of impending disintegration. 37/

Perhaps because the binding forces all emanated from the centre, the end of the Communist regime coincided with the end of the unitary Soviet State. The disintegration of the USSR, anticipated by the separation of the Baltic republics in September 1991, took place in December 1991, at which time the Commonwealth of Independent States was established. It is also worthy of note that the dynamism of the Soviet economy had come to an end by this time and its collapse removed whatever incentives the constituent republics may have had for holding themselves together.

### 5. The former Yugoslavia

The former Yugoslavia was similar to the former USSR in that it contained many nationalities and one dominant nationality - the Serbs - but different in that it was a comparatively new State, formed in the aftermath of the First World War (1914-1918) to combine the existing States of Serbia and Montenegro with territories that had been part of the Austro-Hungarian Empire (Croatia and Slovenia) and ones that more recently had been part of the Ottoman Empire (such as Bosnia and Herzegovina, which had been annexed by Austria-Hungary as late as 1908).

The new State, then, did not have the historic traditions and unity enjoyed by the older States in Europe. In fact, the new country lay along the fault lines of some of the most important divisions in European history - between Christianity and Islam and between Orthodoxy and Roman Catholicism. Conflict stemmed from the fact that many groups - the Orthodox Serbs, the Catholic Croats and the Muslims - were found in the same areas. Those groups might have lived together peacefully; however, they did not think of themselves as forming part of a Yugoslav nation which was, to some extent, a creation designed to avoid the problem of drawing borders between different ethnic groups. Serbs dominated the country. Considerable resentment was built up among the other groups, particularly the Croats.

After the Second World War (1939-1945), unity was again imposed through one-party rule and by a formidable personality, Marshall Tito. The design of the new State, a federation of six republics and two autonomous provinces, was aimed at allaying fears of domination by one group. However, with the death of Marshall Tito and the discrediting of one-party rule, the bonds that had held the republics together disintegrated.

The various republics were determined to attain independence, but the nationalist emotions that surfaced, which were ruthlessly exploited by politicians, made compromise and a peaceful unbinding of the federation difficult. The federal army, which was controlled by the Serbs, intervened to stop Slovenia from breaking away from the republic. However, Slovenia resisted and there was little support within Serbia itself for stopping Slovenia, which did not have a large Serbian minority, from seceding. The army then withdrew.

The case was very different in Croatia and, later, Bosnia and Herzegovina. The degree of collusion between Serbia and local Serbian forces in the fighting in these areas can be a matter for debate. What is not debatable is the fact that the world is now witnessing ethnic conflict and barbarity - "ethnic cleansing", detention centres where civilians are murdered and indiscriminate shelling of civilian populations - on a scale that is scarcely imaginable.

## B. Religious fundamentalism

The rise of fundamentalist and revivalist religious movements has also been the cause of new conflict. The great religions have no national boundaries and bind together people of divergent national and ethnic groups. Conflicts have in recent years come into the open between Muslim and Christian populations in many countries of Africa, Eastern Europe, west Asia and the Philippines; between Muslims and Hindus in India, Pakistan and Bangladesh; among the Sikhs, Hindus and Muslims in India and Pakistan (mainly in the Punjab area); between Muslims and Christians and between Orthodox Christians and Roman Catholics in the former Yugoslavia; between the Jews and their predominantly Muslim Arab neighbours; between Christians, Muslims and Druses in Lebanon; among factions of Muslims in the Islamic Republic of Iran, Iraq and northern Africa; and between Catholic and Protestant communities in Northern Ireland.

Revivalist tendencies among Hindus and Sikhs in India; a new trend associating Buddhism with nationalism in Thailand and Sri Lanka; and recent waves of renewed Confucianism in the Republic of Korea, Taiwan Province of China and Japan have also produced significant tension. 38/

Such religious persecution as was common in earlier periods in history is seldom the cause of religious conflicts today. More commonly, the social and economic differentiation among groups adhering to various religions fuels antagonism among them. The issues involved are access to power and sharing of economic and social well-being. The conflicts have intensified where religious differences have coincided with ethnic ones and discrimination with respect to the distribution of economic well-being and access to political power is perceived to exist.

Fundamentalist and revivalist approaches to religion are not limited to Islam, although the term Islamic fundamentalism is used more commonly than others. Although those approaches are not homogeneous across religions and countries, they share common features. First, they assert their identity in the face of invading religious, social and economic forces (in the case of Islam, those from Europe and North America especially). Some groups in society stand to gain from the assertion of such values while others stand to gain from change. Second, the values fundamentalist and revivalist approaches espouse are not limited to those of religious life but apply as well to individual and social behaviour. Those approaches seek to ensure that the family and its function in society, the division of roles according to gender, questions of social justice, the administration of justice, financial transactions and the exercise of political power are all governed by religious considerations.

Islamic fundamentalist movements have been active in several countries. The Muslim Brethren Association was founded in Egypt in 1928, but was barred as a political party at the beginning of the last decade; in Jordan, it retains a vast presence in parliament. Religion was perhaps the strongest force in the establishment of the Islamic Republic of Iran in 1979. In Lebanon, two major groups, the Hezbollah and the Amal, espouse similar causes. Among Palestinians, Hamas has much support in the West Bank and the Gaza Strip. In Tunisia, the Ennahdha (Renaissance) has sought to affirm Islamic values. In Algeria, the Islamic Salvation Front was successful in both regional and national elections in 1989 and 1991 respectively. In Morocco, the Justice and Welfare Group was politically active in 1990 and 1991. As many of these movements are officially opposed by Governments, they often operate underground and exert widespread influence. In the Libyan Arab Jamahiriya, the situation is more complex as the present Government itself draws on Islamic inspiration. In Saudi Arabia, the United Arab Emirates, Kuwait, Oman and Bahrain, the application of Islamic precepts in government has made fundamentalist movements less challenging and appealing.

Pressure from fundamentalist forces have survived in Turkey in the face of the secularist reforms established by Kemal Ataturk a long time ago. In the Sudan, the National Islamic Front has made the governing Revolutionary Command Council for National Salvation apply shariah, the Muslim code of religous Law. Shiite fundamentalist groups are active in Iraq. Mujahidin groups in Afghanistan have established an Islamic republic. Fundamentalist pressures are also strong in the new republics of Azerbaijan, Kazakhstan, Turkmenistan, Uzbekistan, Kyrgyzstan and Tajikistan (members of the former USSR), where Muslim populations are reasserting their influence on the political scene. Pakistan has been officially an Islamic State for many years. Islamic fundamentalism also has a strong presence in Bangladesh, Indonesia and Malaysia. The Comoros (the Islamic Federal Republic of the Comoros) has started to introduce Islamic laws.

### C. Factors contributing to disintegration and integration

Conflict is not the inevitable consequence of ethnic diversity. Ethnicity is "one of those forces that is community-building in moderation, ... community-destroying in excess". 39/ The perpetuation of discrimination and injustices against ethnic or religious groups, cumulative memories of offenses and humiliations whether real or imagined individual acts of violence or exploitation, remote and ineffective Governments, physical and cultural isolation in the absence of transport and communications and a common language and the sudden demise of an authority that had previously kept order have all contributed to the spread of ethnic conflict and violence in recent years. The affordability and easy availability of powerful firearms have increased the destructive power of these conflicts manyfold.

Most ethnic conflicts arise from fissures buried deep in the past. The antagonism between the Sinhala and the Tamil in Sri Lanka, between Mende and Temne groups in Sierra Leone, between Acholi and Langi in Uganda and between Croats and Serbs in the former Yugoslavia constitute only a few cases in point.

In the formation of nation States in Eastern Europe after the Second World War (1939-1945), several ethnic groups were often aggregated in the same State. History brought together people of different ethnic backgrounds within one nation State, as in the former Yugoslavia. They were held together by powerful central mechanisms, such as the Government of the USSR and the Communist Party, or single-party Governments, such as those in several States in Africa.

Colonization created new boundaries, often dividing ethnic units among colonies or clustering several ethnic groups. Ancient kingdoms were grouped together with stateless rural societies and administrative boundaries were erected that had no historical precedents. 40/ The leaders of independent Africa adopted the principle of the inviolability of established borders. Loyalty to the new nation became the means to hold together multi-ethnic populations; however, in several instances, people were more loyal to ethnic and tribal groups than to central national authorities. Government efforts to generate a national consciousness were frustrated by the predominance of kinship awareness.

The authority of a distant Government will not prevail in fragmented economies. 41/ Ethnic linkages within the immediate surroundings of the family and the village may be more immediate and useful. Opportunities for ethnic integration are scarce. Loyalty is given to sociopolitical units smaller than the nation State. Ancestors are more relevant than official institutions. The absence of roads, railways and common means of communication makes this isolation stronger. Means of transport and communication and a common language to link ethnic groups are essential in binding them together.

Major examples of disintegration have been the breakaway from Pakistan of Bangladesh and the breakup of Czechoslovakia, the USSR and Yugoslavia. Similar changes have occurred in large federal States, such as India and Nigeria, when constituent States multiplied in number.

The factors promoting the integration of nation States are often economic, although there is no evidence that large national economies necessarily grow consistently faster than small ones. The fastest-growing economies in the world include China and Indonesia as well as Hong Kong, the Republic of Korea, Malaysia, Singapore and Thailand. Factor movements are easier within national boundaries than between them, although short-term capital now moves rapidly among nation States with almost complete freedom. Uniform standards and design of equipment sold in large markets permit economies of scale that cannot be achieved in small national markets. The exploitation of some natural resources, such as rivers (for example, the Ganges, the Mekong, the Danube and the Amazon), requires cooperative action among nation States. Some of the most advanced work in science and technology requires collaborative action even among the largest national economies. Sustaining hospitable environmental conditions similarly requires communal action on a global scale.

One of the most powerful factors making for closer integration within a society is the perception by all communities that the standard of living is rising and that opportunities for betterment are open to all. Even when the benefits of growth are not distributed uniformly among ethnic communities, they tend to defuse ethnic tensions to the extent that each community perceives that it is moving up the ladder of economic and social well-being, with an increasing number of individuals gaining access to higher levels of such well being. Where development is stunted and economic space becomes too limiting to permit mobility, there is a tendency for conflict among groups to arise. Benefits from coexistence are often ignored, each group seeking improvements in economic and social well-being at a cost to others.

In contrast, in affluent multi-ethnic societies such as Switzerland and the United States of America, tensions among ethnic groups seem to be absorbed with much less destructive force. Even there, however, persistent economic hardship among selected ethnic groups does erupt into violence, as it did in Los Angeles in April 1992; hitherto welcome immigrant workers have become, as in France, Germany and Italy, targets of hate and violence.

The collapse of binding ties, such as strong centralizing Governments and a single nationwide political party (for example, in the former USSR and Yugoslavia) and of military rule (for example, in Ethiopia and Somalia) has suddenly unleashed ethnic conflicts. Authoritarian rule not only suppressed open debate on political and social issues but also kept in check certain divisive tendencies. The earlier repression of antagonisms left a situation without mechanisms for consultation and compromise among antagonistic ethnic groups. The emergence of multi-party competition for political power in several African countries may unintentionally create opportunities for such conflict. However, new democratic forms of government have the potential to provide social groups that had previously been excluded from power with opportunities to share in political decision-making. This becomes practicable only if those groups are not excluded by a permanent, ethnically different majority.

Pluralistic democracies have shown a capacity to absorb ethnic conflicts and avoid breaking up into separate new States. Separatist movements in Canada, Western Europe and India have not yet led, in spite of sometimes violent demonstrations, to the emergence of breakaway nation States. Frequent dialogue between political opponents, respect for minorities, local autonomy and decentralization of powers contribute to the diffusion of tensions and have been achieved in the large federal States of India and Nigeria.

### D. Internationalization of conflicts

Ethnic and religious conflicts are not merely of local relevance. 42/ Swift communication ensures such rapid and wide diffusion of information concerning violent events as may generate support among particular groups or touch off initiatives to provide humanitarian assistance. There is easy access to international markets for weapons. The Arab-Israeli confrontation and apartheid in South Africa have a world-wide impact, creating tensions in distant areas and generating solidarities, flows of funds and political support. The internationalization of ethnic conflicts is a threat to world peace.

An ethnic conflict in a given country is internationalized when people who live in different, often contiguous countries and are of the same ethnic origin or religious affiliation as some party to the conflict feel a solidarity with that party based on common kinship. 43/ The distribution of the Kurds in Turkey, the Islamic Republic of Iran, Iraq, the Syrian Arab Republic and the former Soviet Union; of the Basques in both Spain and France; of the Tamils in Sri Lanka, India and Malaysia and of the Kakwa in the Sudan, Uganda and Zaire demonstrates the potential for such internationalization of ethnic conflict. People of Indian origin live in countries as far away from India as Fiji, Guyana, Mauritius and Trinidad and Tobago; and their numbers in those countries are large enough to allow them to compete for political power. People of Russian origin live in substantial numbers in virtually all the constituent republics of the former USSR; and now that the latter have become nation States, the treatment of the minorities therein is a matter of concern to all Russians and to the Russian Government. Ethnic conflicts in Burundi and Rwanda, though occurring in different nation States, mostly involve members of the same groups. Because members of some of those groups live in the United Republic of Tanzania, Uganda and Zaire as well as in the

States of the Great Lakes region, they have been in one way or another drawn into the conflict.

People of a given ethnic origin or religious faith may derive support even in far distant places - from fellow Sikhs in Canada and the United States, fellow Palestinians in various Islamic countries, fellow Tamils in Canada, fellow Basques in Central America and fellow Armenians in the United States, for example.

The interest of groups in the fate of kindred groups in neighbouring States (for example, Yorubas in Nigeria and Togo) may involve Governments in domestic conflicts and may internationalize those conflicts. The intervention of the Governments of Greece and Turkey on behalf of the Greeks and Turks in Cyprus and of the Government of India on behalf of the Tamils in Sri Lanka illustrates this point.

Over the years, the United Nations has intervened both to reduce conflict and to establish peace and provide humanitarian assistance. The contexts in which these interventions take place have changed recently. The Security Council, in its resolution 743 of 21 February 1992, decided to establish a United Nations Protection Force (UNPROFOR) as an interim arrangement to create the conditions of peace and security required for the negotiation of an overall settlement of the Yugoslav crisis. UNPROFOR has also been an essential instrument in enabling humanitarian assistance to be delivered to the people affected by the conflict. The Council, in resolution 780 of 6 October 1992, requested the Secretary-General of the United Nations to establish an impartial Commission of Experts to examine and analyse various information, with a view to providing the Council with its conclusions on the evidence of grave breaches of the Geneva Convention and other violations of international law committed in the territory of the former Yugoslavia.

The Security Council, in its resolution 746 of 17 March 1992 urged all the Somali factions to cooperate with the Secretary-General and to facilitate the delivery by the United Nations, its specialized agencies and other humanitarian organizations of humanitarian assistance to all those in need of it. A United Nations Operation in Somalia (UNOSOM) was established by the Security Council in its resolution 751 of 24 April 1992. The increase in strength of UNOSOM was authorized by the Council in its resolution 775 of 28 August 1992. In resolution 794 of 3 December 1992 the Council authorized the Secretary-General and Member States to use all necessary means to establish as soon as possible a secure environment for humanitarian relief operations in Somalia.

Regional intergovernmental organizations have intervened both to bring about peace in areas of conflict as well as to provide humanitarian assistance. The Organization of African Unity, the League of Arab States and the Organization of the Islamic Conference have tried to bring about national reconciliation and unity in Somalia. The Economic Community of West African States sent a joint military force to bring about peace among factions in Liberia. The European Communities and the Conference on Security and Cooperation in Europe have both been active in seeking a political settlement to conflicts in the former Yugoslavia and in providing humanitarian assistance. However, in spite of these efforts, the conflicts and losses in life have continued.

Ethnic and religious conflicts also become questions of international concern when intergovernmental and international voluntary organizations step in to provide humanitarian assistance, as well as information on the violation of human rights. The United Nations Children's Fund (UNICEF), the Office of the United Nations High Commissioner for Refugees (UNHCR) and the World Food Programme (WFP) are prominent among those organizations that provide humanitarian assistance. Among voluntary agencies, the International Committee of the Red Cross is the most prominent. In matters regarding human rights, the Commission on Human Rights and Amnesty International have been the most active.

### E. Self-determination, the new nationalism and separatism

Among the purposes for which the United Nations was established was to develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples. 44/ The grand-scale process of decolonization after the Second World War (1939-1945) was based on this principle of self-determination. One of the main principles invoked by ethnic groups within existing nation States in the course of establishing new ones has been that of self-determination. Both as a matter of practical importance and as a means of maintaining peace, it is necessary to seek to identify those features that entitle peoples to self-determination. Within the new nation States formed in Eastern Europe and the former USSR, there are numerous claims being put forth by peoples on behalf of forming new nation States. In some cases, the process can be harmonious, as when the Czechs of Bohemia and Moravia and the Slovaks of Slovakia decided in a 1992 referendum to form two separate nation States.

In other parts of the world, despite much strife and the existence of long-standing claims, there has been (except for the emergence of Bangladesh in 1973) no splintering of nation States. The claims of Sikhs in India and Tamils in Sri Lanka have not ended with the establishment of new nation States. Despite complaints about the arbitrary boundaries drawn by colonial rulers in Africa, nation States have not broken up into smaller ones. An exception is Eritrea which had been primarily a colony separate from Ethiopia. A referendum to be held in 1993 is expected to decide its future.

Claims for secession have also been put forward by Catholics in Northern Ireland; by Catalans, Basques, Corsicans, Sardinians and South Tyroleans in Western Europe; and by Quebeckers in North America.

Major problems arise when an ethnic group claiming statehood lives intermingled with others and not in a well-demarcated area. Some Tamils in Sri Lanka live in predominantly Sinhalese areas. French-speaking Canadians live in parts of Canada other than Quebec. Serbs, Croats and Moslems live in ethnically mixed communities in the former Yugoslavia. In such instances, attempts to consolidate a territory under one ethnic group often result in mass expulsions, genocide, "ethnic cleansing" and open war. Such experiences have been only too common in modern history, as attested by the mass extermination of Armenians in Turkey in 1915, the expulsions of Greeks from Asia Minor in 1922, and of Germans from Poland and Czechoslovakia, and the expulsion and extermination of Jews from Nazi Germany. The partition of colonial India into two States resulted in the forceful transfer of massive populations. The breakup of the former Yugoslavia has generated a process of "ethnic cleansing" that recalls earlier atrocities. Administratively defined frontiers of the constituent republics of the former Yugoslavia did not follow ethnic lines. Croatia has a significant Serbian minority; and in Bosnia and Herzegovina, Croats, Serbs and Muslims have lived side by side over many generations. Attempts by each ethnic group to "cleanse" itself of people belonging to other groups have brought about catastrophically inhuman conditions.

There are several instances where dangers of a similar nature cannot be ruled out and special efforts need to be made to diffuse tension and ensure respect for human rights. The three Baltic States of Estonia, Latvia and Lithuania contain large Slav populations. Many of the republics of the former USSR are multi-ethnic States, as are Bulgaria, Hungary, Poland and Romania.

The principle of self-determination has sometimes failed to be an instrument of peace. Nationalist movements, which, in order to build a new nation, used to aim at integrating different groups of a geographical area under one flag and thereby overcoming differences in language, tradition, ethnic grouping and religious affiliation, can now be seen to be moving in the opposite direction. 45/ Nationalist movements have become divisive and tend to emphasize differences among communities, by stressing ethnic factors, religious affiliations and the common historical background of smaller groups. Ethnic control over government becomes the goal of such nationalistic aspirations. The new nationalism will be associated with ethnic solidarity and separatism, contrary to past experience.

## F. Conclusions

The spread and intensification of ethnic and religious conflicts in a period when ideological rifts have abated and pluralistic democratic forms of government have become more common has come as a surprise to many, all the more so at a time when many nation States are actively seeking to become integrated for the purpose of achieving greater prosperity. The removal of authoritarian rulers was expected to result in claims for self-determination by communities that had been kept together by force in the past. That a new communality would be sought in ethnic and religious kinship was not expected. In large federal States, such as India and Nigeria, there has been a tendency for the constituent political entities to be identified by linguistic and ethnic characteristics. The alignment of political forces along religious lines has introduced further sources of conflicts in a number of countries. Even when the vast majority of people in a nation State follow the same major religion, new forces demanding stricter adherence to the tenets of that religion and the application of religious precepts to wider spheres, including economic and political domains of society, have created tension and conflict.

The use of force has proven unfit to resolve these conflicts. The use of force destroys much that is valuable in the economy and in society and does not create conditions for cooperation. Decentralization of authority with all groups sharing power has worked in many instances. Democratic forms of government hold out opportunities for such diffusion of power. The enlargement of economic opportunities tend to reduce conflicts as all groups perceive the benefits of life together. Physical infrastructure that ends isolation and integrates communities into larger markets and into units of greater social interaction would greatly help movement in these directions.

Many ethnic and religious conflicts have called forth action at the international level aimed at working out solutions to the problems involved. One part of the international effort is concerned with mitigating the disastrous consequences of violence and destruction. An inherently more difficult part is concerned with finding political solutions to the conflicts. Both regional and world-wide intergovernmental bodies have become engaged in this task. Voluntary international organizations have played an outstanding role in providing humanitarian assistance.

The formation of ethnically homogeneous nation States established on the principle of self-determination carries with it the danger that other compelling factors may be overlooked in the process. Some of the most powerful forces pushing smaller political entities to unite to form large nation States in the nineteenth century were economic. Moves towards unity in Western Europe after the Second World War have been driven by similar forces. Recent advances in technology provide facilities that can bring people physically closer together than they were at any time in the past.

## Notes

1/ See K. Lindgren and others, "Major armed conflicts in 1990", in Stockholm International Peace Research Institute (SIPRI), World Armaments and Disarmament Yearbook, 1991 (Oxford, Oxford University Press), p. 345.

2/ News India (New York), vol. 22, No. 49 (6 December 1991), p. 6. Estimate up to 19 November 1991.

3/ See document A/47/277-S/24111, entitled "An Agenda for Peace: preventive diplomacy, peacemaking and peace-keeping. Report of the Secretary-General pursuant to the statement adopted by the Summit Meeting of the Security Council on 31 January 1992", p. 3.

4/ The Tutsi, sometimes also called the Hima, live in both countries and speak their own dialect, although the dialect is part of the same Bantu languages spoken by the people of the region. In Rwanda, the monarchy used to be in the hands of a Tutsi dynasty, while in Burundi the power was in Hutu hands or, more exactly, the hands of an aristocratic subgroup called Ganwas, although the Hutu king (mwami) used to marry his daughters to the most aristocratic families of the Tutsi. See F. Gaulme, "Le facteur ethnique dans les Etats africains", Etudes (Paris) (février 1987), pp. 149-158.

5/ CEPGL States are Burundi, Rwanda, Uganda, the United Republic of Tanzania and Zaire; and CEPGL has its permanent secretariat in Gisenyi (Rwanda).

6/ Eghosa E. Osaghae, "Ethnic minorities and federalism in Nigeria", African Affairs, vol. 90, No. 354 (April 1991), p. 238; and see also James S. Coleman, Nigeria: Background to Nationalism (Berkeley, University of California, 1958), p. 15.

Notes (continued)

7/ "Nigeria: The country profile, 1991-92", The Economist Intelligence Unit (London), p. 10.

8/ Eghosa E. Osaghae, op. cit., p. 238.

9/ An indicator of the greater importance of regional power was the fact that both Ahmedu Bello and Obafemi Awolowo, the leaders of NPC and AG respectively, preferred to remain regional premiers. In 1959, Ahmedu Bello declined to contest elections to the federal House of Representatives, letting the deputy leader of NPC, Abubaker Tafawa Balewa, become Prime Minister of independent Nigeria.

10/ Ntieyong U. Akpan, The Struggle for Secession, 1966-1970 (London, Frank Cass, 1971), p. xiv. See also Eghosa E. Osaghae, op. cit., pp. 245-246.

11/ Among the more recent serious religious riots were those in December 1980 in the city of Kano, in which some 1,000 people, including 50 policemen, died (see Africa Recorder (New Delhi), 29 January-11 February 1981; p. 5559). Another riot occurred in October 1982 in Maiduguri resulting in 452 casualties, including 100 policemen. The riots later spread to Kaduna, leading to 44 deaths.

12/ The cause of the latest round of communal riots (1991) was a Muslim demonstration (against the visit of the German evangelist preacher, Reinhard Bonnke, touring the north of the country) that went out of control. Much property was destroyed and thousands of Christian refugees had to seek shelter in police and army barracks. See "Nigeria: Country Report, No. 4, 1991", The Economist Intelligence Unit (London), pp. 9-10.

13/ See Eghosa E. Osaghae, "Ethnic minorities and federalism in Nigeria", African Affairs, vol. 90, No. 354 (April 1991), pp. 235-258, for a discussion of the impact of creation of States on the forces of regionalism.

14/ Members of the minorities were eventually appointed to many senior positions in the federal Government, both in the military and the civil service. These positions included Chief of Staff, Supreme Headquarters, Chief of Air Staff and Federal Commissioner for external affairs, for defence, for education, for information and for labour.

15/ See A. H. M. Kirk-Greene, Lugard and the Amalgamation of Nigeria (London, 1969), p. 6; also Emme O. Awa, Federal Government in Nigeria (University of California, 1964), p. 45.

16/ Although many founders of UNC were Ganda themselves, they were not part of the traditional Buganda elite, but constituted a small group of intellectuals. A majority of Ganda chiefs did not accept UNC as a channel for expressing their aspirations.

17/ This dissident group of Ganda was Roman Catholic, whereas most Ganda were Protestant.

## Notes (continued)

18/ Government of India, Ministry of Law, Justice and Company Affairs, Constitution of India (New Delhi, 1977), articles 25-30.

19/ Government of India, India, 1987, Statistical Abstract, 1987 (New Delhi, Central Statistical Organization, Department of Statistics, Ministry of Planning, 1987), pp. 35-36 and 518.

20/ The decision was based on recommendations in the Mandal Commission Report, submitted in 1980, investigating the conditions of the socially and educationally backward classes. See Reservation for Backward Classes: Mandal Commission Report of the Backward Classes Commission, 1980 (Delhi, Akalank Publication, 1991).

21/ See Iqbal Narain, "Cultural pluralism, national integration and democracy in India", Asian Survey, vol. XVI, No. 10 (October 1976), p. 915, n. 9.

22/ Robert L. Hardgrave, Jr., "The Northeast, the Punjab and the regionalization of Indian politics", Asian Survey, vol. XXIII, No. 11 (November 1983), p. 1173.

23/ It is estimated that Sikhs make up about 10 per cent of the Indian army, and constitute a somewhat higher percentage of the officer corps; these are much higher proportions than that of Sikhs in the total population. See Christopher Shackle, The Sikhs, No. 19 (London, Minority Rights Group, 1984), p. 13.

24/ See Rodolfo Staverhagen, The Ethnic Question - Conflicts, Development and Human Rights (Tokyo, United Nations University, 1990), p. 50.

25/ See Carlos Franco, "Nación, Estado y clases: condiciones del debate en los '80", in GEOSUR, IX, No. 97/98 (mayo-junio 1988), p. 13.

26/ For a critical assessment of the racial relationships between the black and the non-black population in Brazil, see Jan Fiola, Race Relations in Brazil: A reassessment of the "Racial Democracy", thesis, Occasional Papers Series, No. 24 (University of Massachusetts at Amherst, Latin American Studies Program, 1990).

27/ For an analysis of the indigenous movements in the Amazonian region, see Jean-Pierre Chaumeil, LES NOUVEAUX CHEFS, Pratiques politiques et organisations indigènes en Amazonie péruvienne; and Christian Gros, Colombie: Nouvelle politique indigéniste et organisations indiennes, both in Problèmes d'Amérique Latine, La Documentation Française, 1990, No. 96, in addition to the large literature on the Brazilian Amazonian populations.

28/ See Colin Clarke, ed., Society and Politics in the Caribbean (Oxford, Macmillan, 1991), pp. 6-7 and 47-73.

## Notes (continued)

29/ The miskitos are an indigenous people who live in the Atlantic coast department of Zelaya in Nicaragua and in the department of Gracias a Dios in Honduras. See Institut Catalá d'Antropologia, Los Miskitos (Madrid, Iepala Fundamentos, 1986), p. 23. Miskito territory was occupied by the Nicaraguans in 1894. No cultural integration was ever implemented.

30/ See Alison Rooper and Hazel Smith, "From nationalism to autonomy: the ethnic question in the Nicaraguan revolution", Race and Class, vol. XXVII, No. 4 (spring 1986), pp. 12-13.

31/ See the letter dated 12 November 1992 from the Permanent Representative of Nicaragua to the United Nations addressed to the Secretary-General (A/47/248), annex II.

32/ See Azzo Ghidinelli, "La mitad de Guatemala discriminada" and Ana Lorena Carrillo, "India y Ladinas. Los ásperos caminos de las mujeres en Guatemala", both in Nueva Sociedad, No. 111 (enero-febrero 1991).

33/ A/C.3/47/11, annex.

34/ For an analysis of these processes, see M. N. Pokrovskii, Russkaia istoriia s drevneishikh vremen (Russian History from the Earliest Times), 7th ed., 4 vols. (Moscow, 1924-1925), partly available in English (up to 1739) under the title History of Russia from the Earliest Times to the Rise of Commercial Capitalism, J. D. Clarkson and M. R. M. Griffiths, eds. (New York, International Publishers, 1931). Also see Walter Kolarz, Russia and her Colonies (Archon Books, 1967), pp. 5-7; and Bohdan Nahaylo and Victor Swoboda, Soviet Disunion - A History of the Nationalities Problem in the USSR (New York, The Free Press (Macmillan), 1990).

35/ See Valevii Tishkov, "Glasnost and nationalities within the Soviet Union", Third World Quarterly (Ottawa, 1989), No. 11(4), p. 19.

36/ World Economic Survey, 1992 (United Nations publication, Sales No. E.92.II.C.1), p. 29.

37/ See Helene Carrere d'Encausse, La gloire des nations ou la fin de l'Empire Sovietique (Paris, Fayard, 1990); and B. Nahaylo and V. Swoboda, op. cit.

38/ For an analysis of these cases, see Fundamentalisms Observed, Martin E. Marty and R. S. Appleby, eds. (Chicago, University of Chicago Press, 1991).

39/ See Youssef M. Choueiri, Islamic Fundamentalism (Boston, Twayne Publishers, 1990).

40/ See Donald L. Horowitz, Ethnic Groups in Conflict (Berkeley and Los Angeles, University of California Press, 1985), pp. xii-xiii.

41/ See A. A. Mazrui, The Africans - A Triple Heritage (Boston-Toronto, Little, Brown and Company, 1986), p. 179.

Notes (continued)

42/ See M. Said, "Integration as a mode of ethnic conflict resolution in Africa", International Interactions (Garden and Breach, Science Publisher, Inc., 1981), vol. 8, No. 4, p. 357.

43/ See D. L. Horowitz, Ethnic Groups in Conflict (Berkeley and Los Angeles, University of California Press, 1985), p. 5.

44/ For an analysis of general conditions favouring this phenomenon and a specific analysis of the internationalization of ethnic conflicts in south and south-east Asia, see K. M. de Silva and R. J. May, eds., Internationalization of Ethnic Conflict (London, Pinter Publishers, 1991), International Centre for Ethnic Studies, Sri Lanka, in association with the Friedrich Ebert Stiftung.

45/ A nation has been characterized as an abstraction, an invention, an imagined community. See Benedict Anderson, Imagined Communities: Reflections on the Origin and Spread of Nationalism (London, Verso Editions, 1983).

# Chapter XIII

## PRODUCTION AND CONSUMPTION PATTERNS AND THE ENVIRONMENT

Although the effects of economic activity on the environment were well perceived several decades back, they began to be systematically articulated only recently. 1/ Nature conservation became a topic of some political significance in the 1964 presidential election in the United States and in the Federal Republic of Germany, where the Social Democratic Party championed the cause of a "blue sky over the Ruhr", the most heavily industrialized region in that country. The damage to the natural environment came under closer scrutiny in many other western countries and Japan, at first mostly by groups of concerned citizens, later by political parties and Governments as well. The first time the relationship between human activity and nature was discussed on a global scale in a major way was in 1972 at the United Nations Conference on the Human Environment in Stockholm. The Stockholm Conference initiated a spurt of environment protection legislation and institution building around the world. 2/

The protection of the environment from past and future damage became the objective of a mass movement, directed in the beginning against nuclear energy, but soon widening in scope and deepening in organizational power. In some 22 countries, national political parties were founded with the principal objective of protecting the environment. 3/

In the developed countries, damage to the environment from industry and agriculture became increasingly evident. In the rural areas, intensive agriculture caused such problems as pollution of groundwater and rivers with nitrates, phosphates, heavy metals and other chemicals and their residuals. Industrial waste poisoned rivers, forests and the atmosphere. Burning of fossil fuels to generate power and to provide transport facilities emitted poisonous gases and particles into the atmosphere. The disposal of waste, both toxic and not, became a problem of major magnitude.

In the former centrally planned economies of Europe and the former USSR, the severity of environmental problems was dramatically demonstrated by the accident at the Chernobyl nuclear reactor in Ukraine in April 1986. Environmental groups such as Eco 88 in Bulgaria played a major role in the civic movements that brought about political changes in those countries between 1989 and 1991. 4/

In the developing countries, accidents like the one at Bhopal, India, demonstrated the dangers of establishing industrial plants without adequate measures to avert disasters. 5/ In the rapidly growing mega-cities, such as Mexico City, São Paulo, Calcutta, Bombay, Shanghai, Tehran, Jakarta, Buenos Aires, Seoul, Lagos, Cairo and a dozen others, problems of air, noise and water pollution, and of waste disposal and urban sprawl, showed up increasingly. 6/ The scarcity of resources in the developing countries made it far more difficult to remedy the damage than in the developed countries. Large infrastructural projects for irrigation, flood control and power generation created new problems. In the rural areas of many developing countries, population pressure on land and the absence of alternative sources of income led to the cultivation of marginal lands causing deforestation and desertification, massive flooding downriver and the loss of many acres of agricultural land owing to salination, erosion or other damage. 7/

New problems affecting not a single country or region but the entire world, such as ozone loss in the stratosphere and the accumulation of heat-trapping gases possibly leading to global warming, became central to discussions of environmental issues in the 1980s. The survival of species became a matter of importance as overexploitation threatened certain species of plant and animal life. It also became clear that the survival of planet Earth and all its inhabitants was endangered by problems of poverty and population growth.

These relationships, problems and their solutions were the main preoccupation of the United Nations Conference on Environment and Development, at Rio de Janeiro in June 1992. It was attended by 118 Heads of State or Government. A round-table summit meeting on 13 June was the largest ever gathering of world leaders. One hundred seventy-two participating Governments focused their attention on ways in which the growing number of men and women on Earth could increase their welfare without further damaging the environment. Some 1,420 accredited non-governmental organizations attended the official conference in order to follow and influence the negotiations. At the same time, more than 400,000 people, representing over 11,000 organizations from 171 countries participated in a Global Forum, a parallel two-week series of events, seminars, lectures and exhibits to bring "people power" to bear in the process of decision-making on environment and development. 8/ Some 9,000 journalists reported on the proceedings. 9/

In the processes preparatory to the Conference, countries were encouraged to take stock of their environmental situation. In numerous studies prepared and meetings held in all regions of the world, those with any stake in society, from business leaders to youth groups, contributed their views on a wide variety of subjects in order to arrive at a comprehensive blueprint for action on sustainable development, adopted by the Rio Conference as Agenda 21. The Conference also agreed on the Rio Declaration on Environment and Development, a series of principles defining the rights and responsibilities of States in this area, and on a set of principles to ensure the sustainable management of forests worldwide. Two legally binding treaties - the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity - were signed at Rio by 150 and 153 countries respectively. In order to follow up and monitor the implementation of Agenda 21, the Conference recommended the establishment of a high-level United Nations Commission on Sustainable Development, in accordance with Article 68 of the Charter of the United Nations. Final arrangements were made by the General Assembly in 1992 and the Commission's first meeting will be held in 1993.

The present chapter provides brief accounts of damage to the environment and their proximate causes. It also demonstrates wide disparities in the intensity of insults to the environment by inhabitants of developed and developing countries. It points out the sort of policies and policy instruments that have been successful in reducing the intensity of environmental pollution. It ends with a discussion of international cooperative action in these areas.

## A. Energy consumption and global warming

Estimated energy requirements in six groups of countries are shown in table XIII.1. While total world energy requirements in 1989 increased by 22 per cent since 1979, per capita requirements increased by only 2 per cent; evidently, energy was used with greater efficiency.

Annual per capita energy requirements ranged from 2 gigajoules in the Comoros to 593 gigajoules in Qatar. In 1989, on average, a citizen in North America and Central America required more than 11 times the energy that a citizen in Africa required. Disregarding traditional fuels and thereby somewhat underestimating consumption in the developing countries, in 1989, a person in an industrialized country consumed about 10 times as much commercial energy as a person in a developing country.

However, the picture changes when one looks at the energy intensity of an economy - the amount of energy needed to produce a unit of output. In 1989, the developing countries consumed 2.5 times the amount of commercial energy per unit of GDP consumed in the developed countries. Between 1965 and 1989, the energy intensity in the developed countries decreased by 7.3 per cent annually, while that of that developing countries decreased by 3.3 per cent per year. 10/

Energy consumption is influenced by many factors, such as the industrial structure, climate, prevailing methods of transportation and the relative price of energy. 11/ For example, energy intensity in the United States in 1989 was almost three times that in Japan and Switzerland. Canada's energy intensity was 50 per cent higher than that in the United States and in the same range as in the Niger, Brazil and Thailand.

Energy intensity in the former centrally planned economies of Central and Eastern Europe was unusually high. Bulgaria, Czechoslovakia, Hungary and Romania used about six times as much energy per unit of GNP as did France and the former Federal Republic of Germany. In Poland, energy intensity was 10 times as high as in its western neighbours and about the same as in China and Somalia.

Another indicator of the total impact of the economy on the environment is the greenhouse index, which measures net emissions of three major greenhouse gases (carbon dioxide, methane and chlorofluorocarbons) in carbon heating equivalents in metric tons per capita. In 1988-1989, that index was about four times as high in the industrialized countries as in the developing ones. Again, there is considerable variation among the countries, with the index in North America 2.5, 2 and 1.8 times as high as in southern Europe, the Nordic countries and the European Community, respectively. 12/

Figure XIII.1 shows 15 countries with the highest volume of total emissions in 1989 ranked according to the percentage share of global emissions. It also shows relative per capita greenhouse emissions. The United States and the former Soviet Union accounted for about 30 per cent of the greenhouse gases and were followed by China, Japan and India. The highest relative per capita emissions came from countries with small populations that are either oil producers, such as Bahrain, Brunei Darussalam, Qatar and the

## Table XIII.1. Energy requirements, 1979-1989

| | Energy requirements in conventional fuel equivalent | | | | | |
|---|---|---|---|---|---|---|
| | Total | | Per capita | | Traditional fuels as percentage of total requirements | |
| | Petajoules 1989 | Per cent change since 1979 | Gigajoules 1989 | Per cent change since 1979 | 1979 | 1989 |
| World | 346 931 | 22 | 67 | 2 | 6 | 6 |
| Africa | 12 363 | 42 | 20 | 6 | 39 | 37 |
| North America and Central America | 98 570 | 8 | 233 | -6 | 2 | 2 |
| South America | 14 240 | 31 | 49 | 6 | 23 | 20 |
| Asia | 84 136 | 52 | 28 | 26 | 13 | 10 |
| Europe | 74 398 | 6 | 146 | 2 | 1 | 1 |
| Oceania | 4 624 | 39 | 176 | 19 | 4 | 4 |

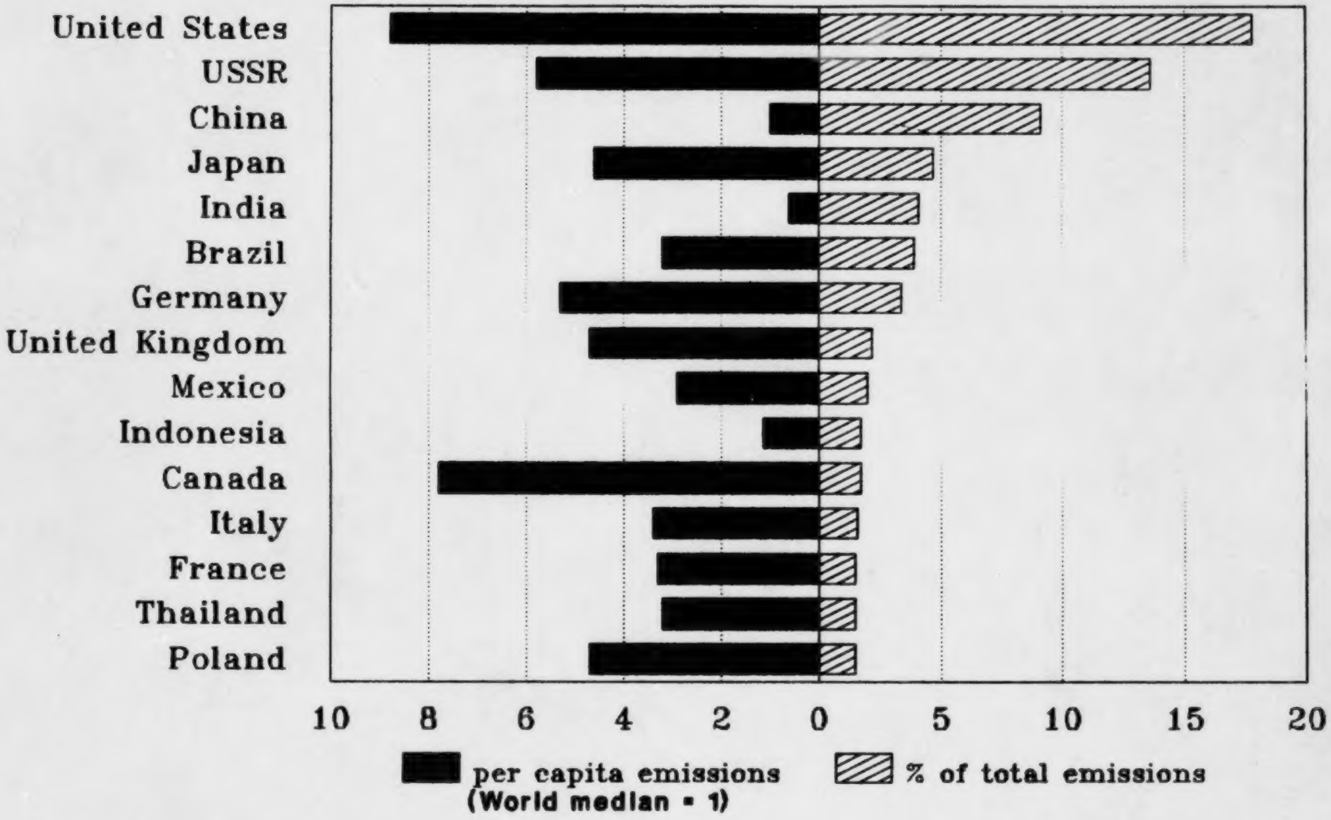
Source: World Resources Institute, in collaboration with the United Nations Environment Programme and the United Nations Development Programme, World Resources 1992-93 (New York, Oxford University Press, 1992), pp. 316-317.

Notes: 1 petajoule = 1 quadrillion joules = 947.8 billion BTUs = 163,400 barrels of oil.

1 gigajoule = 1 billion joules = 947,800 BTUs

1 megajoule = 1 million joules = 947.8 BTUs.

Figure XIII.1. Greenhouse emissions in 15 countries, 1989



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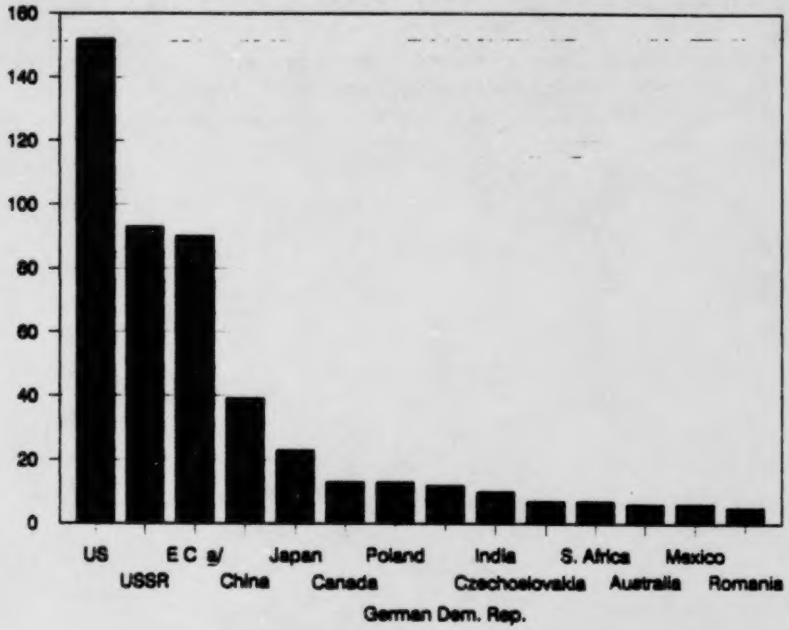
Source: UN/DESD, based on World Resources Institute, in collaboration with the United Nations Environment Programme and the United Nations Development Programme, World Resources 1992-93 (New York, Oxford University Press, 1992), pp. 208, 210.

United Arab Emirates, or have significant deforestation, such as Côte d'Ivoire. Because of their huge populations, China and India rank high on total emissions but rank below the first 50 for per capita emissions. The potential per capita warming impact of a United States resident is 8.7 times that of a resident of China and 14.3 times that of a resident of India. The impact of a resident of Japan is 53 per cent of that of a United States resident and 38 per cent of that of a resident of France. 13/

These disparities become even more obvious when one looks at the cumulative emissions of carbon dioxide, the most important greenhouse gas, from fossil fuels in 25 countries with the highest emissions during the period 1950-1989 (see figure XIII.2).

Figure XIII.2. Cumulative emissions of carbon dioxide from fossil fuels in 25 countries with the highest emissions, 1950-1989

(Billion tons of carbon dioxide)



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Source: UN/DESD, based on World Resources Institute, in collaboration with the United Nations Environment Programme and the United Nations Development Programme, World Resources 1992-93 (New York, Oxford University Press, 1992).

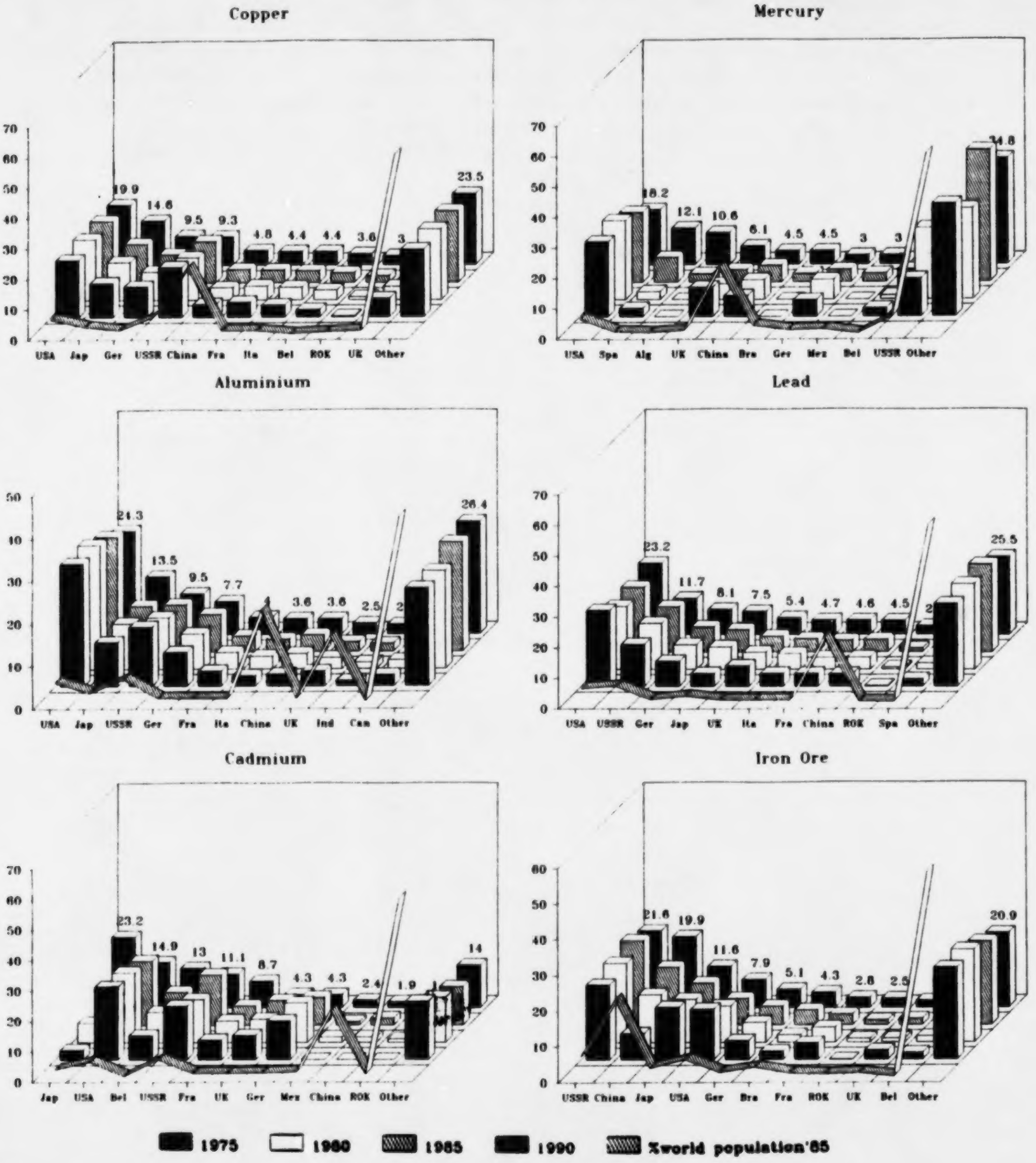
a/ The European Community (EC) comprises 12 countries: Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and United Kingdom.

## B. Metal consumption

Figure XIII.3 shows the shares of the 10 biggest consumer countries of six metals and relates them to their respective shares in world population in 1985. Among the 10 largest consumers, only Brazil, China, India and the Republic of Korea among the developing countries can be found with some regularity. A similar pattern prevails in the consumption of crude steel, nickel, tin and zinc, not shown in figure XIII.3. Even in cases where the developing countries are among the 10 biggest consumer countries, their share in total world consumption is substantially less than their share in world population. 14/

Figure XIII.3.  Consumption of selected metals and population size

(Percentage of world total)



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Source:  UN/DESD, based on World Resources Institute, in collaboration with the United Nations Environment Programme and the United Nations Development Programme, World Resources 1992-93 (New York, Oxford University Press, 1992), table 21.5, pp. 320-321; and World Population Prospects, 1990 (United Nations publication, Sales No. E.91.XIII.4).

### C. Solid waste

Rising mountains of solid waste impart one of the most visible and potentially dangerous adverse consequences on the environment. 15/ Industry is the biggest producer of solid waste (see figure XIII.4). The amount of industrial waste generated in the OECD countries has increased from about 1 billion tons annually in the early 1980s to about 1.3 billion tons per year in the mid-1980s and to 1.5 billion tons in 1990, including over 300 million tons of hazardous waste. 16/

Several countries, including Australia, Italy, New Zealand and the United States, dealt with almost all their hazardous waste within their own borders. Some others exported theirs, up to 70 per cent in the case of Ireland and 43.5 per cent in that of Austria (see table XIII.2). Fifty-nine per cent of those exports are not reported as either imports by countries included in the table (29 per cent of total waste exports listed) or as dumped or incinerated at sea (12 per cent of waste exports), implying that they have been exported to countries not listed in the table, mostly those in Eastern Europe or the developing countries. 17/

Municipal waste is a substantial part of the total of some nine billion tons of waste generated in 1990 in the OECD countries. In those countries, municipal waste comprises 11 per cent of all solid waste generated, ranging from 6.5 per cent in the countries of the European Community to 16.4 per cent in the United States (see figure XIII.4).

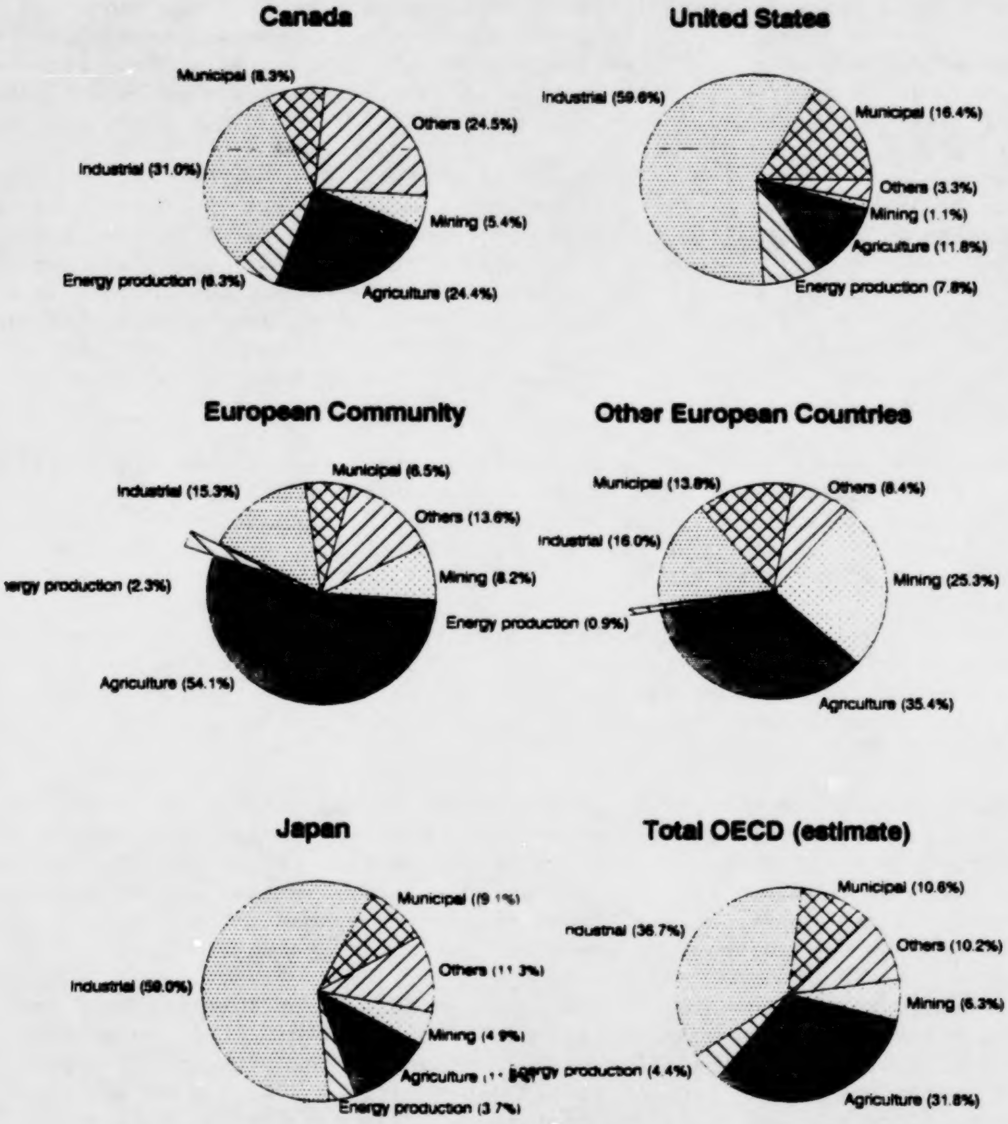
Municipal waste per capita varies greatly among the OECD countries and has grown considerably from 1975 to the late 1980s except in the former Federal Republic of Germany and the Netherlands. However, except in Spain and Switzerland, growth was lower than in private final consumption expenditure. 18/

Waste management policy has an important role to play in the reduction, reuse and safe disposal of solid waste. 19/ What was yesterday's waste can become today's raw material. A saving of 1.5 barrels of oil results when one ton of steel is produced from scrap instead of ore. In the case of copper, 87 per cent of energy is saved. Paper manufacturers can achieve energy savings of up to 60 per cent by using old paper (see table XIII.3).

For some forms of waste, in particular metals, recycling has been well under way for years. But, in many cases; it has been difficult to establish economically profitable recycling. 20/ The average recovery rate for paper in the OECD area was 27 per cent in 1975, 30 per cent in 1980 and 34 per cent in the late 1980s; for glass, 22 per cent in 1980, 29 per cent in 1985 and 32 per cent in the late 1980s. 21/

Information about solid waste in the developing countries is very limited. Figure XIII.5 shows the composition of municipal waste in three cities in Colombia, India and Nigeria in comparison with that in the United Kingdom. The proportion of vegetable matter is between two and three times higher in the cities in the developing countries as compared to cities in the United Kingdom. It is estimated that per capita waste in industrialized countries averages about 10 times as much as in developing countries. 22/

Figure XIII.4. Sources of solid waste generation in selected countries, late 1980s



**Canada**

**United States**

**European Community**

**Other European Countries**

**Japan**

**Total OECD (estimate)**

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Source: UN/DESD, based on OECD Environmental Data Compendium 1991 (Paris, OECD, 1991), table 7.1, p. 131.

Table XIII.2. Production and movement of hazardous and special wastes in selected countries, mid-1980s

| Region/country | Year | Hazardous and special wastes produced (Thousand tons) | Imports (Thousand tons) | Imports (Percentage) | Exports (Thousand tons) | Exports (Percentage) | Dumping at sea (Thousand tons) | Dumping at sea (Percentage) | Incineration at sea (Thousand tons) | Incineration at sea (Percentage) |
|---|---|---|---|---|---|---|---|---|---|---|
| NORTH AMERICA | | | | | | | | | | |
| Canada a/ | 1980 | 3 290 | 120.0 | 3.6 | 101.0 | 3.1 | | | | |
| Puerto Rico | 1987 | 50 | | | 12.5 | 25.0 | | | | |
| USA b/ | 1987 | 238 327 | 40.0 | | 127.0 | 0.1 | | | | |
| ASIA | | | | | | | | | | |
| China, Taiwan c/ | Annual | 2 900 | | | | | | | | |
| India | 1980 | 36 000 d/ | | | | | | | | |
| Israel | 1988 | 25 e/ | | | | | | | | |
| Japan | 1986 | 666 | | | 0.04 | | | | | |
| Rep. of Malaysia | 1985 | 419 f/ | | | | | | | | |
| Korea c/ | Annual | 733 | | | | | | | | |
| EUROPE | | | | | | | | | | |
| Austria g/ | 1987 | 400 | | | 87.0 | 43.5 | | | | |
| Denmark | 1988 | 112 | | | 9.0 | 8.0 | | | | |
| Finland | 1987 | 230 | | | 65.0 | 28.3 | | | | |
| France b/ | 1989 | 3 000 | 250.0 | 8.3 | 45.0 | 1.5 | | | 15.0 | 0.5 |
| Germany, Fed. Rep. of | 1988 | 14 210 | 20.2 | 0.1 | 805.4 | 5.7 | | | | |
| Hungary | 1986 | 5 000 h/ | 0.0 | | 0.0 | | | | | |
| Ireland | 1984 | 20 | | | 14.0 | 70.0 | | | | |
| Italy | 1989 | 3 640 | | | 3.0 | 0.1 | | | | |
| Luxembourg | 1986 | 6 | 0.0 | | 1.3 | | | | | |
| Netherlands i/ | 1986 | 1 500 | | | 188.0 | 12.5 | | | | |
| Norway | 1989 | 200 | | | 8.0 | 4.0 | | | 5.9 | 3.0 |
| Spain | 1987 | 1 708 | | | 0.1 | | | | | |

Table XIII.2 (continued)

| Region/country | Year | Hazardous and special wastes produced (Thousand tons) | Imports | | Exports | | Dumping at sea | | Incineration at sea | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | (Thousand tons) | (Percentage) | (Thousand tons) | (Percentage) | (Thousand tons) | (Percentage) | (Thousand tons) | (Percentage) |
| Sweden b/ i/ | 1985 | 500 | | | 30.2 | 6.0 | | | 5.9 | 1.2 |
| Switzerland | 1989 | 400 | | | 108.0 | 27.0 | | | | |
| Turkey | 1989 | 300 | | | | | | | | |
| United Kingdom k/ | 1989 | 2 200 | 34.2 | 1.5 | | | 160.0 | 9.0 l/ | 5.5 | 0.3 l/ |
| OCEANIA | | | | | | | | | | |
| Australia | 1980 | 300 | | | 0.3 | 0.1 | | | | |
| New Zealand | 1982 | 60 | | | 0.2 | 0.3 | | | | |
| Total | | 316 196 | 464.4 | 0.15 | 1 605.04 | 0.51 | 160.0 | 0.05 | 32.30 | 0.01 |

Source: United Nations/DESD, based on OECD, OECD Environmental Data Compendium 1991 and UNEP, Environmental Data Report (Oxford, Basic Blackwell, 1991).

(Footnotes on following page)

(Footnotes to table XIII.2)

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a/ Hazardous waste produced: wet weight.

b/ Data on amounts imported and exported refer to 1988.

c/ Annual average figure: does not refer to any specific 12-month period.

d/ Figure refers to selected industries only; these include pesticides, dyes and pigments, pharmaceuticals, organic chemicals, fertilizers, steel production, non-ferrous metals and caustic soda.

e/ Figure is wastes tranferred to the Ramat Hovav disposal site. It is estimated that this amount constitutes only half of all hazardous waste produced in Israel.

f/ Data expressed as cubic metres.

g/ Data for export refer to 1983 (amounts and share).

h/ Includes 3 million tons of red mud from aluminium production.

i/ Excluding ship cleaning residuals.

j/ Data on amounts incinerated refer to 1980.

k/ Fiscal year commencing 1 April.

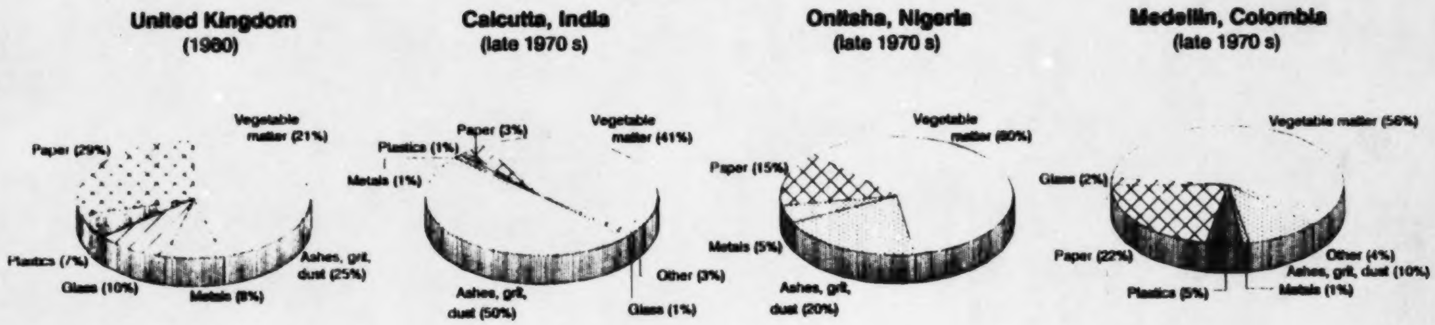
l/ Data refer to 1988/89 total special waste (1,762 kt).

### Table XIII.3. Environmental benefits of use of secondary materials

| | Potential saving (Percentage) | | | |
|---|---|---|---|---|
| | Aluminium | Steel | Paper | Glass |
| Energy use | 90-97 | 47-74 | 23-74 | 4-23 |
| Air pollution | 95 | 85 | 74 | 20 |
| Water pollution | 97 | 76 | 35 | - |
| Mining wastes | - | 97 | - | 80 |
| Water use | - | 40 | 58 | 50 |

Source: UNEP, Environmental Data Report (Oxford, Basil Blackwell, 1991), p. 340.

Figure XIII.5. Composition of municipal waste



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Source: UNEP, Environmental Data Report (Oxford, Basil Blackwell, 1991), p. 334.

## D. Water resources and water quality

World-wide water use increased threefold, from 1,360 cubic kilometres in 1950 to 4,130 cubic kilometres in 1990, and is expected to reach 5,190 cubic kilometres by the year 2000. 23/ While water is a renewable resource, natural circumstances rarely make it available in the right amount at the right place at the right time. In many parts of the developing countries, communities experience almost continuous shortages of water.

Two billion people live in areas with chronic shortages, and in 88 developing countries, with 40 per cent of the world's population, water deficits are already a serious constraint on development, often because of rapid population growth in conjunction with a lack of infrastructure. 24/ Twenty-two countries have renewable water resources of less than 1,000 cubic metres per capita, a level at which water scarcity becomes a severe constraint on development. An additional 18 countries have less than 2,000 cubic metres on average, which is considered dangerously little in years of short rainfall. Most of the countries with limited renewable water resources are in the Middle East, North Africa and sub-Saharan Africa, regions where populations are growing fastest (see table XIII.4). 25/

Agriculture accounts for 69 per cent of water withdrawals world wide. In Europe, industry dominates, with 54 per cent of withdrawals. In Oceania, 64 per cent of all water is used by households. The industrial sector accounts for only a few percentage points in most developing countries. Withdrawals for agriculture are above 60 per cent in most developing countries; in 19 countries they are higher than 90 per cent. 26/

Most countries use less then 10 per cent of their available water resources. But Egypt, with 97 per cent usage, Malta, with 92, and Israel, with 88 per cent, have hardly any reserves left. Some of the oil-producing desert countries use more water than their natural resources provide. By desalinating seawater and importing water from other countries, they use between 164 per cent (Saudi Arabia) and 663 per cent (Qatar) of their natural water resources.

The share of industry and domestic use in total water withdrawals increases with growing incomes (see figure XIII.6). In high-income countries, per capita annual withdrawal of water is 1,217 cubic metres - more than double the amount the average person in a middle-income country uses. That person's annual withdrawal is 5.34 cubic metres, 7 per cent higher than in low-income countries, which amounts to 498 cubic metres annually. 27/

About 25 per cent of agricultural, 86 per cent of industrial and 60 per cent of water used for domestic purposes is returned to streams, rivers and coastal waters as wastewater. 28/ That wastewater, laden with a multiplicity of pollutants, can cause great damage to soils, fish and other aquatic life, and to human health.

In the OECD countries, the population served by treatment plants for domestic discharges of water has increased from 33 per cent in 1970 to 60 per cent in the late 1980s. 29/ That progress in wastewater treatment is reflected in the improved quality of rivers in the OECD countries. The annual mean concentrations of biological oxygen-demanding substances at the mouth or downstream river frontiers give a kind of summary balance between

Table XIII.4. Availability of water by region

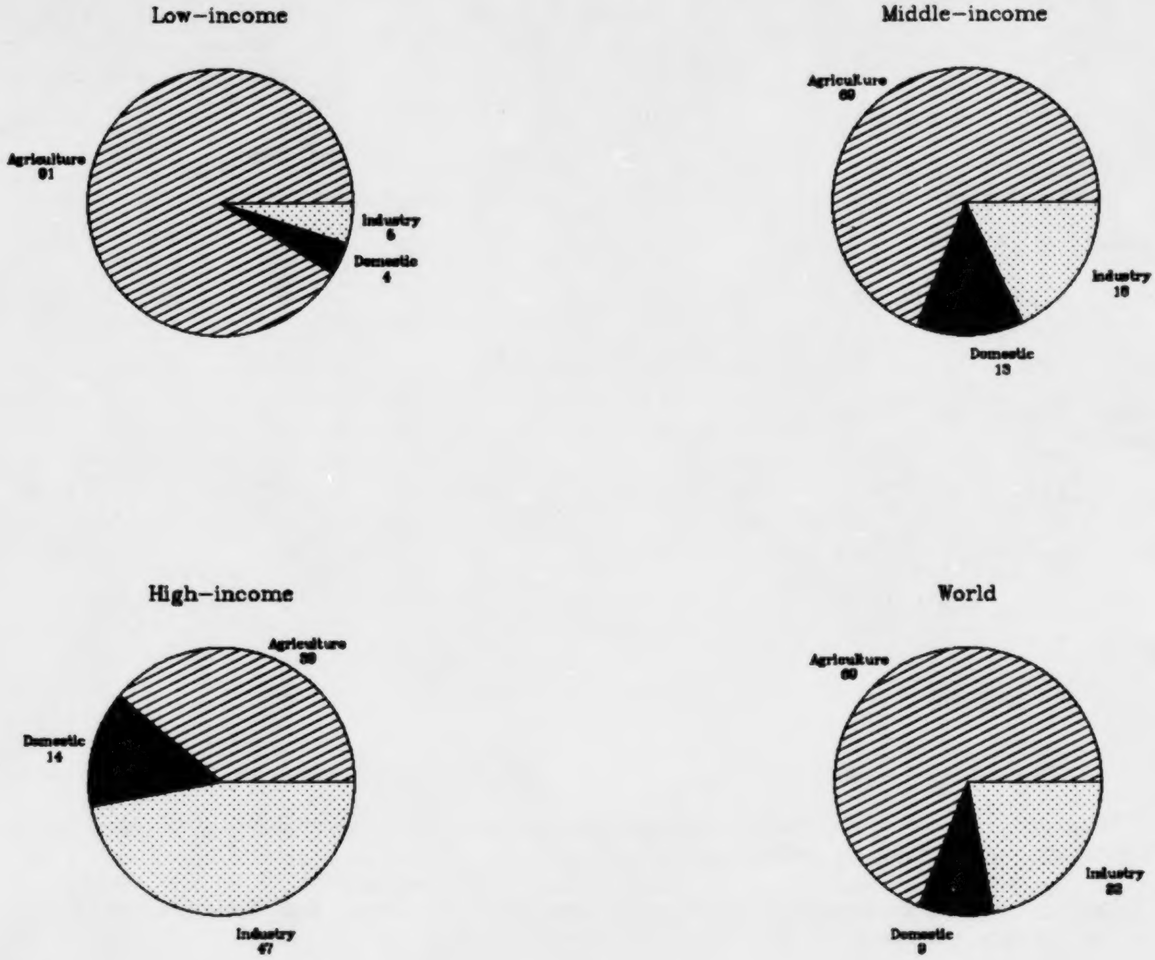
| Region | Annual internal renewable water resources |  | Percentage of population living in countries with scarce annual per capita resources |  |
|---|---|---|---|---|
|  | Total (thousands of cubic kilometres) | Per capita (thousands of cubic metres) | Less than 1,000 cubic metres | 1,000-2,000 cubic metres |
| Sub-Saharan Africa | 3.8 | 7.1 | 8 | 16 |
| East Asia and the Pacific | 9.3 | 5.3 | 1 | 6 |
| South Asia | 4.9 | 4.2 | 0 | 0 |
| Eastern Europe and former USSR | 4.7 | 11.4 | 3 | 19 |
| Other Europe | 2.0 | 4.6 | 6 | 15 |
| Middle East and North Africa | 0.3 | 1.0 | 53 | 18 |
| Latin America and the Caribbean | 10.6 | 23.9 | 1 | 4 |
| Canada and United States | 5.4 | 19.4 | 0 | 0 |
| World | 40.9 | 7.7 | 4 | 8 |

Source: World Bank, World Development Report, 1992 (New York, Oxford University Press, 1992), table 2.1, p. 48.

Note: Regional groups include high-income economies. Sub-Saharan Africa includes South Africa.

## Figure XIII.6. Sectoral withdrawal as a share of total water resources

(Percentage)



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Source: UN/DESD, based on World Bank, World Development Report 1992 (New York, Oxford University Press, 1992), table A.3, p. 197.

oxygen-demanding pollution and depollution efforts upstream. They have improved (decreased) in many cases (see table XIII.5). In contrast, nitrate concentrations have increased in most rivers, mainly from agricultural origins such as animal manure and fertilizer.

There has also been no marked progress in reducing the effluence of metals and toxic substances except, in the case of lead, where concentrations near the mouth of rivers in Belgium, Canada, the former Federal Republic of Germany, Japan and the United Kingdom have decreased between 1970 and 1985. Similar developments have been reported in the United States. Rivers flowing into the North Sea from western Germany, the Netherlands and the United Kingdom carry several thousand tons of heavy metals and arsenic into it yearly. In Sweden, the discharge of toxic metals was reduced from 1,300 tons to 55 tons per year between 1972 and 1985, but 40 tons of chrome are still discharged per year. Japan has made very significant progress in fighting toxic pollution. The number of "bad" samples decreased from 0.63 per cent in 1971 to 0.03 per cent in 1987. 30/

Water pollution is one of the most severe environmental problems in the countries of Central and Eastern Europe. Raw sewage and industrial effluents laced with heavy metals and toxic (and sometimes radioactive) chemicals are the principal contributors to the deterioration of water quality in these rivers. For example, in Upper Silesia (Poland), some 950,000 cubic metres of saline water is pumped daily from coal mines. Some 650,000 cubic metres of that, containing about 7,000 tons of salt, is fed daily into the tributaries of the Oder and Vistula Rivers, making much of their water useless either for drinking or for industrial purposes. In Poland, class I water, defined as drinkable after disinfection, decreased from 33 per cent of the total length of monitored rivers in 1967 to 4 per cent in 1986. Water, virtually unusable even for industrial purposes, increased from 23 per cent in 1967 to 39 per cent in 1986. About half of all Polish cities, including Warsaw, and 15 per cent of Poland's industrial facilities have no wastewater treatment systems. About 32 per cent of wastewater needing treatment is left untreated.

In Czechoslovakia, 27 per cent of the major river lengths have been classified as incapable of sustaining fish or containing inedible fish. About 60 per cent of wastewater is not adequately treated. Sewage sludge, which was once sought after as fertilizer, in many industrial areas is now a toxic waste because of contamination with heavy metals, especially cadmium. Average nitrate levels in groundwater in the built-up areas of cities and towns rose from 30 to 120 milligrams per litre over the past 30 years. 31/

In Hungary, 75 per cent of groundwater is contaminated, mostly by agricultural run-off and municipal and industrial discharges, and requires treatment before use. Because of water shortages and pollution, some 700 of the 3,000 cities and towns rely on bottled or transported water from other parts of the country. In Romania, 65 per cent of the major rivers have non-potable water. Only 10 per cent of wastewater discharges are treated adequately. 32/

In the former Soviet Union, toxic pollutants in many water systems have reached many times the maximum permissible concentrations. In 44 per cent of the territory of the former Soviet Union, groundwater pollution is between 1 and 10 times the permissible level. In 34 per cent of the area, pollution is

Table XIII.5. Water quality of selected rivers in OECD countries, 1970 and late 1980s

| | | Biological oxygen demand (mg/litre) | | | Nitrate (mgN/litre) | | |
|---|---|---|---|---|---|---|---|
| | | 1970 | Late 1980s | Average last 3 years available | 1970 | Late 1980s | Average last 3 years available |
| USA | Delaware | 2.1 | 2.0 | 2.1 | .. | 1.20 | 1.12 |
| | Mississippi | 3.0 | 1.4 | 1.5 | .. | 0.90 | 1.10 |
| Japan | Ishikari | 1.9 | 1.5 | 1.3 | 0.36 | .. | .. |
| | Yodo | 5.2 | 3.3 | 3.5 | .. | .. | .. |
| Australia | Brisbane est. | .. | 1.2 | .. | .. | 1.05 | .. |
| Belgium | Escaut-Doel | 4.0 | 2.3 | 2.7 | 3.00 | 5.06 | 4.98 |
| Denmark | Gudenaa | .. | 3.5 | 3.0 | .. | 1.25 | 1.39 |
| Finland | Tornionjoki | 3.0 | 2.6 | 2.8 | .. | 0.47 | .. |
| France | Loire | 6.7 | 6.4 | 6.9 | 1.58 | 2.53 | 2.56 |
| | Rhone | 2.9 | 2.4 | 4.4 | 0.88 | 1.38 | 1.82 |
| Germany | Rhine | 6.1 | 2.9 | 3.1 | 1.82 | 3.70 | 3.77 |
| | Donau | 4.8 | 2.5 | 2.5 | 0.20 | 0.50 | 1.53 |
| Italy | Po | .. | 8.3 | 7.2 | 0.95 | 1.68 | 2.34 |
| Netherlands | Meuse | 6.2 | 1.3 | 1.5 | 3.07 | 3.86 | 4.08 |
| | Ijssel-Kampen | 5.7 | .. | .. | 2.76 | 4.33 | .. |
| Norway | Skienselva | .. | .. | .. | .. | 0.20 | 0.25 |
| Portugal | Tejo | 1.6 | 1.5 | 1.7 | 0.52 | 0.67 | 0.97 |
| Spain | Guadalquivir | .. | 8.3 | 9.2 | .. | 3.47 | 3.34 |
| Switzerland | Rhine | .. | .. | .. | .. | 1.76 | 1.70 |
| Turkey | Porsuk | .. | 1.2 | 1.4 | .. | 1.28 | 1.36 |
| UK | Thames | .. | 2.4 | 2.5 | .. | 7.67 | 7.07 |
| | Mersey | .. | 5.9 | 5.1 | .. | 2.86 | 2.82 |
| Yugoslavia | Dunau | 4.3 | 3.5 | 4.1 | .. | 2.42 | 2.21 |

Source: OECD, The State of the Environment, 1991 (Paris, 1991), p. 61.

between 10 and 100 times the standard and, in 32 per cent of the land, it is more than 100 times higher. 33/

Many rivers are in a critical condition. Petroleum products, phenols, salts of heavy metals and organochlorine pesticides have been recorded at levels above the maximum permissible concentrations, particularly near large ports, at the mouth of rivers and in some gulf areas. Accidents are reported to be quite frequent at municipal treatment plants, leading to peak concentrations of pollutants in rivers and coastal areas, and the closure of beaches at Baltic, Azov and Black Sea resorts. 34/ It has been estimated that the costs resulting from pollution and natural resource degradation, including health costs but not compensation to victims, amounted to 15 to 17 per cent of GNP. 35/

While in Europe 72 per cent of sewage is treated in some way, the proportion is very low in the developing countries. In the Caribbean Basin, less than 10 per cent of sewage is treated. In South-East and South Asia, West and Central Africa, there is almost zero treatment. 36/ Only about 2 per cent of the human and industrial waste produced in the developing countries receives any treatment. The rest, including some 2 million tons a day of human excrement, and all the toxic and hazardous by-products of industrial production, are discarded to pollute soils, rivers and underground aquifers. 37/

The annual mean concentration of dissolved oxygen in rivers changed little during the period 1979-1990 (see table XIII.6). The exceptions are the Indus in Pakistan and the Atoyac and the Lerma in Mexico, whose water quality measured in dissolved oxygen deteriorated annually by 13.6, 47.5 and 18.6 per cent respectively. At five measuring points in three rivers in India, the annual mean concentration of fecal coliform bacteria increased between 1979 and 1990, on average, by 75 per cent annually. On the positive side, pollution with fecal coliform in the Guanda in Brazil declined by 47 per cent, and in the Ijssel in the Netherlands by 43 per cent annually between 1979 and 1986.

Table XIII.6. Water quality indicators, for selected river, 1979-1990

| | | Dissolved oxygen | | | | Fecal coliform | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Annual mean concentration (Milligrams per litre) | | | Average annual growth rate | Annual mean concentration (Number per 100-millilitre sample) | | | Average annual growth rate |
| Country | River, city | 1979-1982 | 1983-1986 | 1987-1990 | (Percentage) | 1979-1982 | 1983-1986 | 1987-1990 | (Percentage) |
| Low-income | | | | | | | | | |
| Bangladesh | Karnaphuli | 5.7 | 6.1 | .. | -1.1 (5) | .. | .. | .. | .. (3) |
| Bangladesh | Meghna | 6.5 | 7.0 | .. | 2.6 (5) | 3 133 | 700 | .. | -35.1 (5) |
| China | Pearl, Hong Kong | 7.6 | 7.8 | 7.8 | 0.4 (11) | 519 | 563 | 174 | -14.4 (10) |
| China | Yangtze, Shanghai | 8.3 | 8.3 | 8.2 | -0.1 (11) | 316 | 464 | 731 | 10.6 (11) |
| China | Yellow, Beijing | 9.8 | 9.7 | 9.8 | -0.1 (11) | 711 | 1 337 | 1 539 | 9.8 (11) |
| India | Cauveri, d/s from KRS Reservoir | 7.2 | 7.6 | 7.3 | 0.8 (9) | 51 | 681 | 445 | 63.8 (9) |
| India | Cauveri, Satyagalan | 7.0 | 7.3 | 7.5 | 1.1 (9) | 10 | 684 | 920 | 121.8 (9) |
| India | Godavari, Dhalegaon | 6.5 | 6.6 | 6.7 | 0.3 (9) | .. | .. | .. | .. (0) |
| India | Godavari, Mancherial | 8.0 | 8.0 | 7.3 | -1.1 (9) | 5 | 5 | 8 | 19.7 (7) |
| India | Godavari, Polavaram | 7.2 | 7.2 | 6.9 | 0.0 (8) | 4 | 2 | 4 | -3.8 (7) |
| India | Sabarmati, Dharoi | 9.4 | 9.1 | 8.9 | 0.0 (9) | 248 | 222 | 220 | -15.4 (8) |
| India | Subarnarekha, Jamshedpur | 8.0 | 7.9 | 7.5 | -0.2 (9) | 659 | 4 513 | 2 800 | 89.0 (9) |
| India | Subarnarekha, Ranchi | 6.7 | 4.0 | 5.3 | -6.2 (9) | 1 239 | 7 988 | 3 100 | 70.5 (9) |
| India | Tapti, Burhanpur | 7.5 | 6.9 | 6.1 | -2.3 (9) | .. | 110 | 130 | -23.2 (4) |
| India | Tapti, Nepanagar | 7.2 | 7.0 | 7.0 | -0.6 (9) | .. | 19 | 163 | 76.0 (4) |
| Pakistan | Chenab, Gujra Branch | 6.2 | 6.8 | 7.1 | 1.8 (10) | 436 | 463 | 446 | -1.7 (10) |
| Pakistan | Indus, Kotri | 7.6 | 7.2 | 2.6 | -13.6 (11) | 105 | 121 | 78 | -3.4 (11) |
| Pakistan | Ravi, d/s from Lahore | 6.8 | 5.7 | 6.3 | -1.4 (12) | 378 | 746 | 555 | -2.4 (10) |
| Pakistan | Ravi, u/s from Lahore | 7.2 | 6.7 | 7.0 | -0.8 (12) | 275 | 392 | 249 | -6.6 (10) |
| Sudan | Blue Nile | 7.3 | 8.2 | .. | 3.3 (7) | .. | .. | .. | .. (0) |
| Middle-income | | | | | | | | | |
| Argentina | de la Plata, Buenos Aires | 7.6 | 7.5 | .. | 0.0 (8) | 828 | 230 | .. | -23.1 (8) |
| Argentina | Parana Corrientes | 8.1 | 8.0 | 8.1 | 0.1 (10) | 185 | 146 | 111 | -6.6 (10) |
| Brazil | Guandu, Tomada d'Agua | 8.1 | 7.8 | 7.7 | -0.7 (11) | 1 202 | 2 452 | 6 | -47.0 (8) |
| Brazil | Paraiba, Aparecida | 6.0 | 6.1 | 6.0 | -0.4 (7) | 13 950 | 9 800 | 6 075 | -11.5 (7) |
| Brazil | Paraiba, Barra Mansa | 7.4 | 7.6 | 7.8 | 0.4 (11) | 8 003 | 8 100 | 8 | -33.4 (7) |
| Chile | Maipo, el Manzano | 12.9 | 13.2 | 10.8 | -1.4 (10) | 871 | 705 | 775 | 5.3 (8) |
| Chile | Mapocho, Los Almendros | 11.8 | 12.1 | 10.0 | -1.7 (10) | 2 | 2 | 5 | 8.0 (8) |
| Colombia | Cauca Juanchito | .. | 5.2 | 4.8 | 1.0 (5) | .. | 10 000 | 10 000 | 0.0 (4) |
| Ecuador | San Pedro | 7.7 | 7.8 | .. | -0.1 (5) | 80 000 | 30 603 | .. | -31.5 (4) |

Table XIII.6 (continued)

| Country | River, city | Dissolved oxygen: Annual mean concentration (Milligrams per litre) 1979-1982 | 1983-1986 | 1987-1990 | Average annual growth rate (Percentage) | Fecal coliform: Annual mean concentration (Number per 100-millilitre sample) 1979-1982 | 1983-1986 | 1987-1990 | Average annual growth rate (Percentage) |
|---|---|---|---|---|---|---|---|---|---|
| Fiji | Waimanu | 7.6 | 7.8 | 8.0 | 0.5 (9) | 600 | 1 605 | .. | 8.1 (7) |
| Hungary | Danube | 9.4 | 10.4 | 9.9 | 1.7 (10) | 3 419 | 3 075 | 3 750 | 1.2 (10) |
| Korea, Republic of | Han | .. | 10.5 | 10.4 | -0.2 (8) | .. | 8 | 12 | 14.4 (8) |
| Malaysia | Kinta | 6.8 | 7.5 | 8.3 | 2.9 (7) | .. | .. | .. | .. (0) |
| Malaysia | Klang | 3.0 | 3.3 | 2.8 | -1.1 (9) | .. | .. | .. | .. (1) |
| Malaysia | Linggi | 3.4 | 3.6 | 3.7 | 0.9 (10) | .. | .. | .. | .. (0) |
| Malaysia | Muda | 7.3 | 7.2 | 6.3 | -1.3 (8) | .. | .. | .. | .. (0) |
| Mexico | Atoyac | 3.5 | 1.7 | 0.3 | 47.5 (9) | 157 500 | 105 000 | 916 667 | 23.9 (7) |
| Mexico | Balsas | 7.6 | 6.3 | 6.8 | -1.9 (10) | 1 558 | 26 833 | 130 000 | 95.4 (8) |
| Mexico | Blanco | 5.0 | 3.4 | 4.1 | -3.7 (9) | 21 717 | 39 500 | 12 150 | 1.8 (8) |
| Mexico | Colorado | 7.9 | 8.7 | 8.2 | 1.4 (9) | 277 | 58 | 37 | -28.7 (7) |
| Mexico | Lerma | 0.3 | 0.4 | 0.5 | -18.6 (10) | 192 250 | 165 000 | 67 | 5.7 (7) |
| Mexico | Panuco | 7.7 | 8.1 | 8.3 | 0.7 (11) | 110 | 201 | .. | -27.8 (6) |
| Panama | Aguas Claras | 7.9 | 8.2 | .. | 0.4 (7) | 219 | 143 | .. | -14.4 (6) |
| Panama | San Felix | 8.2 | 8.0 | .. | -1.0 (7) | 850 | 753 | .. | -6.2 (6) |
| Philippines | Cagayan | 7.8 | 7.9 | 8.1 | 0.3 (11) | .. | .. | .. | .. (3) |
| Portugal | Tejo, Santarem | 8.9 | 8.6 | 8.4 | -0.7 (9) | 2 252 | 4 163 | 4 225 | 24.6 (9) |
| Thailand | Chao Phrya, d/s from Nakhon Sawan | 6.3 | 6.3 | .. | 0.2 (8) | 1 093 | 1 745 | .. | 47.7 (7) |
| Thailand | Prasak, Kaeng Khoi | 6.6 | 7.7 | .. | 8.0 (5) | 596 | 2 724 | .. | 9.9 (8) |
| Turkey | Porsuk, Agackoy | 9.0 | 9.1 | 9.2 | 0.7 (9) | .. | .. | .. | .. (1) |
| Turkey | Sekarya, Adetepe | 9.2 | 8.7 | 8.9 | -0.3 (8) | .. | .. | .. | .. (1) |
| Uruguay | de la Plata, Colonia | .. | .. | .. | 7.1 (3) | .. | 453 | 93 | 54.6 (4) |
| Uruguay | Uruguay Bella Union | .. | 7.9 | 8.4 | -1.4 (4) | .. | 200 | 1 100 | 66.9 (4) |
| High-income | | | | | | | | | |
| Australia | Murray | 10.0 | 9.4 | 9.1 | 1.0 (6) | .. | .. | .. | .. (0) |
| Australia | Murray, Mannum | 7.1 | 8.2 | 8.6 | 2.4 (8) | 33 | 103 | 80 | 15.8 (8) |
| Belgium | Escaut, Bleharies | 5.7 | 6.2 | 5.9 | 1.1 (11) | 76 | 579 | 867 | 40.8 (11) |
| Belgium | Meuse, Heer/Agimont | 10.5 | 10.8 | 11.3 | 0.8 (11) | 30 | 1 391 | 1 700 | 69.7 (11) |
| Belgium | Meuse, Lanaye Ternaaien | 9.2 | 8.4 | 8.9 | -0.7 (11) | 147 | 5 233 | 7 100 | 78.2 (11) |
| Japan | Kiso, Asahi | 10.0 | 10.6 | 11.7 | 1.7 (11) | 300 | 400 | 216 | -4.1 (11) |
| Japan | Kiso, Inuyama | 10.8 | 10.5 | 10.8 | -0.2 (10) | 610 | 491 | 600 | -2.0 (10) |
| Japan | Kiso, Shimo-Ochiai | 11.2 | 11.1 | 11.4 | 0.3 (10) | 546 | 443 | 353 | -6.0 (10) |

Table XIII.6 (continued)

| Country | River, city | Dissolved oxygen | | | | Fecal coliform | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Annual mean concentration (Milligrams per litre) | | | Average annual growth rate | Annual mean concentration (Number per 100-millilitre sample) | | | Average annual growth rate |
| | | 1979-1982 | 1983-1986 | 1987-1990 | (Percentage) | 1979-1982 | 1983-1986 | 1987-1990 | (Percentage) |
| Japan | Shinano, Zuiun Bridge | 10.1 | 10.3 | 10.3 | 0.2 (10) | 290 | 346 | 193 | -3.0 (10) |
| Japan | Tone, Tone-Ozeki | 10.0 | 9.9 | 10.4 | 0.5 (10) | 521 | 593 | 618 | 3.7 (10) |
| Japan | Yodo, Hirakata Bridge | 8.7 | 8.4 | 8.4 | -0.4 (11) | 72 000 | 70 333 | .. | 9.3 (7) |
| Netherlands | Ijssel (arm of Rhine) | 8.7 | 7.9 | .. | -3.3 (6) | 9 833 | 2 050 | .. | -43.0 (5) |
| Netherlands | Rhine, German frontier | 8.5 | 8.0 | .. | -2.6 (6) | 17 633 | 10 500 | .. | -11.8 (5) |
| United Kingdom | Thames | 9.9 | 10.3 | 9.1 | 0.2 (8) | .. | .. | .. | .. (0) |
| United States | Delaware, Trenton, N.J. | 11.1 | 10.6 | .. | -2.5 (7) | 74 | 197 | .. | -4.0 (7) |
| United States | Hudson, Green Island, N.Y. | 9.8 | 12.1 | .. | 4.2 (7) | 941 | 792 | .. | -7.4 (7) |
| United States | Mississippi, Vicksburg, Miss. | 8.4 | 8.3 | .. | -.2 (7) | 435 | 1 473 | .. | 40.2 (7) |

Source: World Bank, World Development Report, 1992 (New York, Oxford University Press, 1992), table A.4, p. 198.

Notes: d/s, downstream; u/s, upstream.

Numbers in parentheses denote the number of years of observations. Data have been presented only when they are available for four or more years.

## E. Soil degradation, desertification and deforestation

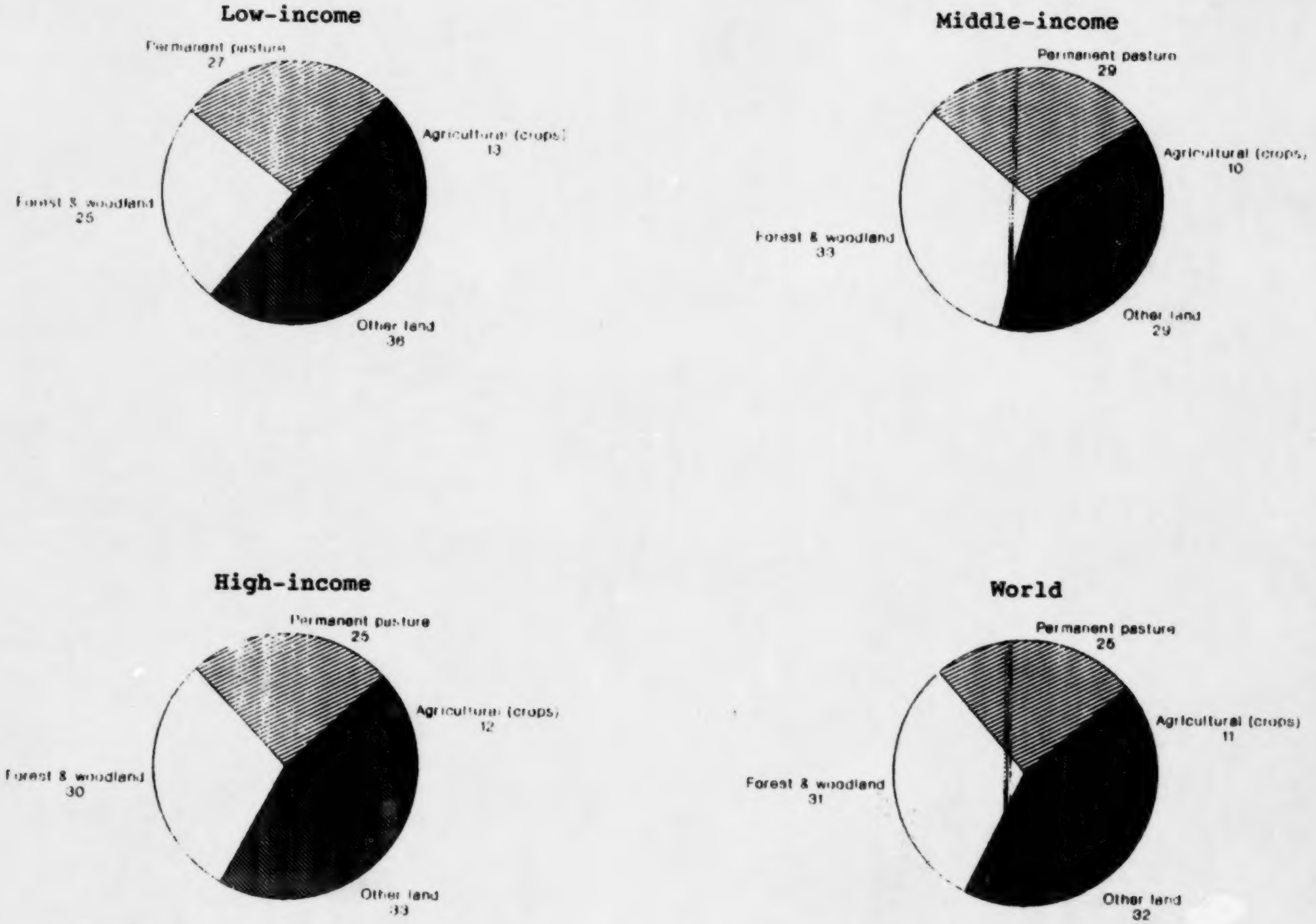
There is little correlation among income levels and the shares of land area devoted to different uses (see figure XIII.7). In 1989, forest and woodland occupied 31 per cent of the land surface of the Earth. Permanent pasture covered 25 per cent. Agricultural land, usually planted with temporary or permanent crops, comprised 11 per cent. Unused but potentially productive land, built-on areas, wasteland, parks, ornamental gardens, roads, lanes, barren land and any other land not specifically listed constituted 32 per cent of the total land in the world. The world's potentially cultivable land has been estimated at about 3.2 billion hectares, more than twice the area currently used as cropland. About 70 per cent of the potentially cultivable land in the developed countries and 36 per cent in the developing countries is currently used for crops.

Given the increasing population density in the low- and middle-income countries, the loss of permanent pasture and forest and woodland, which has been high since 1965, can be expected to continue, with implications for microclimate changes that are difficult to foresee. They are most likely to cause increasing problems of loss of soil fertility, deforestation and desertification.

Soils are formed over very long periods of time, generally from a few thousand to millions of years. Misguided human activity can destroy soils in a few years or decades, often irreversibly. Traditional farming practices had been well balanced with soil sustainability. Recent human management of agro-ecosystems has been steadily intensified, through irrigation and drainage, heavy inputs of energy and chemicals, and improved crop varieties increasingly grown as monocultures. Although bringing some general growth in agricultural production, this process has made agro-ecosystems more and more artificial and often unstable and prone to rapid degradation. 38/ The recent Global Assessment of Soil Degradation, carried out by the International Soil Reference and Information Centre in the Netherlands, estimated that 15 per cent of the Earth's land area and about 26 per cent of arable land, permanent pasture and grazing land had been degraded to varying degrees as a result of human mismanagement. The main forms of such degradation were water erosion, wind erosion, chemical degradation, that is, loss of nutrients, salinization, pollution and acidification, and physical degradation, that is, compaction, waterlogging and subsidence. Overgrazing accounted for 34.5 per cent of the degraded area and deforestation 29.5 per cent (see figure XIII.8). 39/

Figure XIII.7. Share of land area in alternative uses, 1989

(Percentage)



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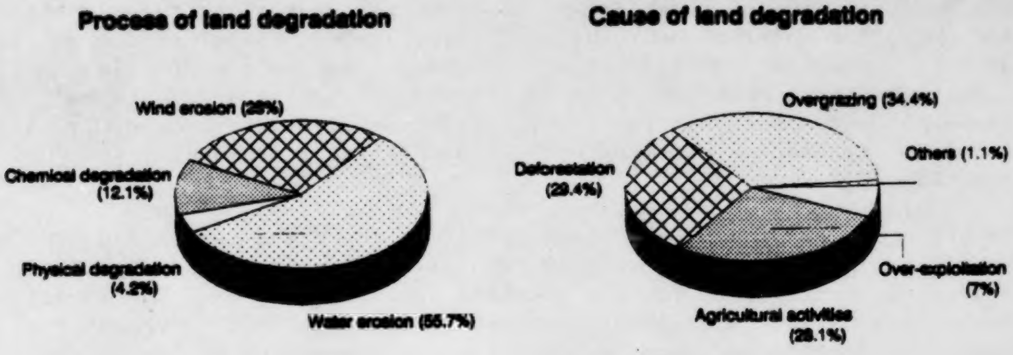
Source: UN/DESD, based on World Bank, World Development Report 1992 (New York, Oxford University Press, 1992).

Figure XIII.8. Land degradation processes and causes



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Source: UN/DESD, based on UNEP, The State of the Environment, 1972-1992 (Nairobi, 1992), p. 42.

## F. Policies to protect the environment

The emphasis of environmental policy has shifted over the years. The earliest measures were to clean up the environment. Recycling glass, metals, plastics and other materials was the next step. Later, measures were adopted to reduce the amount of environmentally damaging input into production processes. The final phase has been to completely redesign products and production processes to avoid environmental damage. 40/ There have also been moves towards stronger enforcement of laws and stricter punishment for breaking them. 41/

In the early years of environmental policy, the focus was on cleaning up the damage done or adding on so-called "end-of-pipe" technologies, such as wastewater treatment plants for the chemical industry to prevent or at least limit pollution of rivers and seas. Policy instruments used were mostly of a regulatory character. For example, certain limits were set on the concentration of toxic material in water or foodstuffs, and lead was no longer permitted as an ingredient in gasoline in the United States. In countries that became signatories to the 1979 Convention on Long-range Transboundary Air Pollution and its related protocols on sulphur compounds (Helsinki, 1985) and nitrogen oxides (Sofia, 1988), coal-fueled electricity-generating plants and other industrial concerns were obliged to operate scrubbers, which reduced the amount of sulphur emitted. 42/ To reduce air pollution in Mexico City, a number of industrial enterprises were forced to close. 43/ In Thailand, logging was first restricted to licensed concerns and, in 1988, completely outlawed after floods, partly caused by the deforestation of watersheds, devastated large areas in the south of the country and claimed hundreds of lives. 44/

That approach, which relied on permits and prohibitions, came under heavy attack by the polluters who lost incomes and who argued that the additional investment required made their operations unprofitable and put them at a disadvantage against competitors. 45/ Only strong public support made it possible for Governments to enact environment protection legislation.

Positive incentives were another instrument of early environmental policy. For example, subsidies or tax deductions were given to industry to develop and consumers to install energy-saving equipment in the United States and Europe after the oil crises of the 1970s. Several European countries gave tax rebates for cars equipped with catalytic converters. In the United States the installation of those devices has been mandatory since 1970.

Related instruments include charges on industries or households according to the amount of waste or toxic effluents they produce. High charges provide an incentive for producers and consumers to reduce the amount of pollution. Where fees were low, polluters preferred to pay the fee instead of investing in treatment facilities. By increasing taxes when the price of oil fell in the mid-1980s, European countries continued to provide an incentive to develop energy-efficient cars. In the United States, fuel efficiency standards in car fleets were not increased as the real price of gasoline fell and was lower in 1990 than prior to the oil crisis in 1973. 46/

A more recently canvassed policy instrument has been that of setting a certain level of allowable pollution in a specific area and letting individual market participants decide how to reach that level by establishing a market for selling and buying "rights to pollute". 47/ The United States Clean Air Act of 1990 introduced that particular instrument, and recently there have been transactions in that market. 48/

Information is a powerful instrument to guide producers and consumers and make them aware of the consequences of their actions on the environment. In several countries, including Germany and Canada, labelling systems have been introduced to indicate to the consumer that certain products cause less damage to the environment than others with the same uses. In 1991, France established a labelling system based on the "cradle-to-grave" concept of measuring the environmental impact of a product during its entire life cycle. 49/ The European Community is in the process of establishing a community-wide labelling system. 50/

Methods are being developed to adequately present the cost of action or non-action on environmental issues in company balance sheets, as well as in national accounts. 51/

A different kind of information is provided by environmental impact assessments, which are now required in many countries and for all projects financed by the World Bank that are expected to have an impact on the environment, before permission to go ahead is granted or financing obtained.

OECD has introduced regular joint reviews of the environment policies of each of its 24 member countries. The reviews will be carried out in the same way as OECD "country examinations" of economic policies, with a view to assessing the extent to which countries' announced policies are translated into effective action. 52/

Pricing and public policies have a great deal to do with promoting behaviour friendly to the environment. For example, as long as it is cheaper to commute to work by private car, because gas prices are low, free parking is provided by the employer and a tax deduction can be claimed for the distance driven between home and the workplace, it is rational for people to use a car instead of public transport. The result of those individually rational decisions is a heavy toll on human health and life, air and noise pollution and loss of time in traffic jams. 53/ Further, the tax systems could be restructured so as to support environmentally friendly activities and punish behaviour that causes damage to the environment. 54/

In many instances, a damage to the environment concerns not only one country, but several. Rivers run through more than one country, oceans and seas are bordered by many, airborne pollution causes acidification of lakes and rivers thousands of kilometres from the source of the pollution, and radiation from nuclear accidents spreads with winds.

There are other problems that are the concern of the whole world. In recent years, particular attention has been given to ozone depletion, global warming and preserving forests and to biodiversity in general.

Avoiding ozone depletion in the upper atmosphere is the objective of the Vienna Agreement and the Montreal Protocol on Substances that Deplete the Ozone Layer, negotiated in 1985 and 1987 respectively. The Protocol links trade to environmentally friendly behaviour and provides resources to the developing countries that are parties to the Agreement to assist them to phase out completely the production and use of ozone-destroying chlorofluorocarbons. As at November 1992, 93 countries were parties to the Protocol, which had been strengthened by amendments adopted in London in 1990. The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes was agreed upon in March 1989 and entered into force in May 1992. As at November 1992, 35 countries are parties to that Convention. Global warming and biodiversity were the subjects of legally binding agreements opened for signature at the Rio Conference.

As part of the follow-up to the Earth Summit, the General Assembly, at its forty-seventh session, agreed to hold a global conference on the sustainable development of small island developing countries in Barbados in April 1994 (resolution 47/189). It also established an intergovernmental negotiating committee for a convention to combat desertification to be completed by June 1994 (resolution 47/188). An intergovernmental conference on straddling and highly migratory fish stocks will be held at United Nations Headquarters in July 1993 (resolution 47/192). The General Assembly designated 22 March as World Day for Water and States were invited to devote that day, as appropriate in the national context, to concrete activities in the area of water protection (resolution 47/193).

A major outstanding problem is how to pay for the research and investment necessary for the developing countries to grow without damage to the environment. Some mechanisms, such as the Global Environment Facility, under the joint leadership of the World Bank, UNDP and UNEP, and a number of debt-for-nature swaps, have been organized. At the Rio Conference the developed countries renewed their pledge to devote 0.7 per cent of their GDP for assistance to the developing countries. The goal is being reached, but slowly. A reasonably satisfactory solution is not yet in sight.

## G. Conclusions

The protection of the environment from patterns of consumption and production remains a problem of momentous importance. Poverty in the developing countries cannot be a necessary condition for the preservation of the environment. Nor can current patterns of consumption in the developed countries continue without damage to the environment. The rise in intensity in agricultural production in the developing countries and the diversification of their economies cannot be held back because these processes would damage the environment. The rise in income in the developing countries would contribute to lessen the severity of certain environmental problems. Sewage would be treated and deforestation would be reduced. New knowledge, awareness and technology permit some reduction in the intensity of environmental damage caused by production. More research and investment are essential to go further along these lines. That journey remains one of partnership between the developed and the developing countries.

## Notes

1/ The beginning of the modern concern with the environment is often traced to the publishing of Rachel Carson's Silent Spring in the United States in 1962, which was one of the first books to protest the use of weed-killers and insecticides as a hazard to both wildlife and humans. See, for example, Constance Mungall and Digby J. McLaren, eds., Planet under Stress: The Challenge of Global Change (Toronto, Oxford University Press, 1990), pp. 44 and 247.

2/ However, it soon became clear that laws and regulations by themselves were not sufficient to protect nature; effective implementation of legislation turned out to be a major problem. See, for example, Renate Mayntz and others, Vollzugsprobleme der Umweltpolitik (Implementation problems of environmental policy) (Wiesbaden, 1978), or Renate Mayntz, "Intergovernmental implementation of environmental policy", in Kenneth Hanf and Fritz W. Scharpf, eds., Interorganizational Policy Making - Limits of Coordination and Central Control, Modern Politics Series, vol. 1 (London, 1978), pp. 201-214; see, also, "Le ministère de l'environnement n'a toujours pas atteint l'âge adult", Le Monde, 6 February 1991.

3/ Joni Seager, ed., The State of the Earth Atlas (New York, Touchstone/Simon and Schuster, 1990), international table, pp. 90 ff. In the United States, the annual Earth Day celebrations attracted thousands of people in many cities. In Germany, mass demonstrations at the building sites of nuclear energy stations were a regular occurrence throughout the 1970s; the "Greens" established themselves as a national political party in 1979, and in 1983 their first representatives were elected to the Bundestag, the national Parliament. In 1985, they participated for the first time in Government, at the State level, in a coalition with the Social Democrats, in Hesse.

4/ See, for example, Richard Crampton, "The intelligentsia, the ecology and the opposition in Bulgaria", The World Today, vol. 46, No. 2 (February 1990), pp. 23-26.

5/ See, also, "Korean industry faces growing pressure to come clean", International Herald Tribune, 17 April 1991; "A fast fire, and a Thai slum's slow poisoning", The New York Times, 21 March 1991.

6/ See "China: Breathing the air of success" (on pollution and health problems in China), The Economist, 15 February 1992; "Chileans pay dearly for economic growth", The New York Times, 10 December 1991; "Es gibt nur einen Himmel" (There is only one sky), a report on pollution in China, Der Spiegel, 29 April 1991; "Patancheru journal. 300 factories add up to India's very sick town", The New York Times, 6 February 1991; "Sao Paulo journal. The pollution is horror enough. Now alligators", The New York Times, 5 November 1990; "Wishing pollution were unmade in Taiwan", The New York Times, 30 October 1990.

7/ See Assessment of Desertification and Drought in the Sudano-Sahelian Region, 1985-1991 (New York, United Nations Sudano-Sahelian Office, January 1992); Josef Herkendell and Eckehard Koch, Bodenzerstoerung in den Tropen (Soil destruction in the tropics) (Munich, Beck, 1991).

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8/ Who is who at the Earth Summit, Rio de Janeiro, 1992 (co-published by Visionlink Education Foundation and Terra Christa Communications, 1992), p. 3; Warren H. Lindner, "Pains and gains of the Rio experience", Earth Summit Times, 14 September 1992, p. 5.

9/ Rohit Menezes, "How to play the information game", Earth Summit Times, 14 September 1992, p. 27.

10/ UNDP, Human Development Report 1992 (New York, Oxford University Press, 1992), p. 173.

11/ See, for example, "Technology is found to exist to cut global warming gases", The New York Times, 8 February 1991.

12/ UNDP, Human Development Report ..., p. 203.

13/ World Resources Institute, in collaboration with UNEP and UNDP, World Resources 1992-93 (New York, Oxford University Press, 1992), pp. 208-210.

14/ For more details, see World Resources 1992-93 ..., table 21.5, pp. 320-321,

15/ See 1989 Report on the World Social Situation (United Nations publication, Sales No. E.89.IV.1), p. 59.

16/ OECD, The State of the Environment 1991 (Paris, 1991), p. 148.

17/ On trafficking of German toxic waste to Romania, see "Ungeahnte dimension" (Unimagined dimension), Stern, 10 September 1992; see, also, "Latin nations getting others' waste", The New York Times, 16 December 1991.

18/ OECD, Environmental Indicators (Paris, 1991).

19/ See, for example, "The garbage problem: it may be politics, not nature", The New York Times, 26 February 1991.

20/ On prospects and complications of recycling, see, for example, "The 7 levels of plastic in recycling-by-the-numbers", The New York Times, 11 October 1992; "Clash of the cans" (on the battle of the aluminium and steel industries over the drinks market), Financial Times, 9 September 1992; "New York outpaces its recycling effort", ibid.; "Niemand braucht Hunderte von Parkbaenken aus grauem Plastik" (Nobody needs hundreds of park benches made out of grey plastic), Frankfurter Allgemeine Zeitung, 19 May 1992; "Rosiger Schimmer. Der gruene Punkt, das spektakulaere Abfallprojekt der deutschen Wirtschaft, funktioniert nicht - es fehlen Recycling-Anlagen fuer Kunststoffe" (Pink glimmer. The green point, the spectacular waste project of German industry does not work - there is a lack of recycling plants for plastics), Der Spiegel, 20 January 1992; "Das wird ein teures Vergnuegen" (That pleasure is going to cost a lot of money - a report on the planned establishment of mandatory plastics recycling), Der Spiegel, 27 May 1991; "Recycling. How to throw things away", The Economist, 13 April 1991; "Old cars get a new lease on life", Financial Times, 3 April 1991; "As recycling becomes a growth industry, its paradoxes also multiply", The New York Times, 20 January 1991; "U.S. paper recycling hurts Europe's system", The New York Times, 11 December 1990.

21/ OECD, The State of the Environment, 1991 (Paris, 1991), p. 153.

22/ UNFPA, Population, Resources and the Environment: The Critical Challenges (New York, 1991), p. 65.

23/ UNEP, The State of the Environment, 1972-1992 (Nairobi, 1992), p. 34.

24/ UNFPA, op. cit., pp. 35, 39.

25/ World Bank, World Development Report, 1992 (New York, Oxford University Press, 1992), p. 48.

26/ See World Resources 1992-93 ..., pp. 328-329.

27/ World Bank, World Development Report 1992 ..., p. 197.

28/ See World Resources 1992-93 ..., p. 161.

29/ OECD, The State of the Environment, 1991 (Paris, 1991), p. 58.

30/ Ibid., pp. 60-63.

31/ See World Resources 1992-93 ..., p. 64.

32/ Zbigniew Bochniarz, "Environmental policies in Central and Eastern Europe: development and implementation" (Minneapolis, University of Minnesota, Hubert H. Humphrey Institute of Public Affairs, 1992), p. 4.

33/ Statement made by Gennadiy A. Yagodin, Rector of the International University, Moscow, at a seminar held at the Department of Economic and Social Development on 8 October 1992.

34/ V. I. Danilov-Danilyan and J. M. Arski, "The environment in the USSR: economics and ecology", report prepared for the ECE Joint Working Group on Environment and Economics, second session, 18-20 December 1991 (ENVWA/WG.2/R.9, EC.AD.WG.1/R.9, 26 August 1991), p. 9.

35/ "Graveyard money: the high cost of Soviet pollution", International Herald Tribune, 26 March 1991.

36/ See World Resources 1992-93 ..., table 11.3, p. 168.

37/ Statement made by Arcot Ramachandran, Executive Director of the United Nations Centre for Human Settlements (Habitat) to the International Conference on Water and Environment, Dublin, Ireland, 26 January 1991, p. 2.

38/ UNEP, op. cit., p. 41.

39/ Ibid., pp. 42-43.

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40/ See "Reincarnation in the design studio", Financial Times, 3 April 1991; Lucien Chabason and Jacques Theys, "Le plan national pour l'environnement", Futuribles, March 1991, pp. 45-68; Sheldon K. Friedlander, "Pollution prevention: implications for engineering design, research and education", Environment, vol. 31, No. 4 (May 1989), pp. 10-15, 36-38.

41/ "Increasingly, prison term is the price for polluters", The New York Times, 11 February 1991.

42/ For details, see The State of Transboundary Air Pollution: 1989 Update, Air Pollution Studies No. 6 (United Nations publication, Sales No. E.90.II.E.33).

43/ For details, see "Mexico City orders polluters to clean up", The New York Times, 25 March 1992; "Mexico closes giant oil refinery to ease pollution in the capital", The New York Times, 19 March 1991; "Gasping, Mexicans act to clear the capital's air", The New York Times, 31 January 1991.

44/ Thailand National Report to the United Nations Conference on Environment and Development, June 1992, p. 135.

45/ See, for example, "Industry fights Massachusetts plan on recycling", The New York Times, 27 October 1992; "Die Atommacht von Hanau" (The atomic power of Hanau - on the influence of the Siemens corporation on German electricity-generating companies), Die Zeit, 6 December 1991; "Heavy energy tax is proposed to curb emissions in Europe", The New York Times, 26 September 1991.

46/ "Why America still hates the words 'energy policy'", The New York Times, 17 February 1991.

47/ See, for example, UNCTAD, Combating Global Warming. Study on a Global System of Tradeable Carbon Emission Entitlements (New York, 1992); "Trying a market approach to smog", The New York Times, 25 March 1992; Johannes Heister and others, Umweltpolitik mit handelbaren Emissionsrechten. Moeglichkeiten zur Verringerung der Kohlendioxid- und stickoxidemissionen (Environment policy and tradeable emission rights. Possibilities to reduce emissions of carbon dioxide and nitrogen oxides) (Tuebingen, Verlag J. C. B. Mohr (Paul Siebeck), 1991).

48/ See "Trying a market approach to smog", see also UNCTAD, op. cit.

49/ "Le label 'NF-Environnement' est ne", Le Monde, 14 February 1991.

50/ "EC environmental label plan changes course", International Herald Tribune, 26 April 1991; "A 'green label' for Europe's consumer goods", The New York Times, 14 December 1990.

51/ See, for the first example, "Intangible costs of the environment", Financial Times, 8 October 1990; for the latter, refer to World Economic Survey 1991 (United Nations publication, Sales No. E.91.II.C.1), pp. 196-197; Peter Bartelmus, Ernst Lutz and Stefan Schweinfest, Integrated Environmental and Economic Accounting. A Case Study for Papua New Guinea, Environment Working Paper No. 54 (Washington, D.C., World Bank, July 1992); Jan von Tongeren and others, Integrated Environmental and Economic Accounting. A Case Study for Mexico, Environment Working Paper No. 50 (Washington, D.C., World Bank, December 1991).

52/ "OECD Ministers draw up environment policy guide", International Herald Tribune, 31 January 1991; "L'OCDE planche sur le 'capital nature'", Liberation, 31 January 1991.

53/ See, for example, "Wir sind fuer Tempo 120" (We support a speed limit of 120 km/h - an interview with the Director of the Federal Environment Office on speed limits and transport policy), Der Spiegel, 3 February 1992; "The transport situation is so bad that it can only get better" (on transport policy in the United States), International Herald Tribune, 2 April 1991.

54/ See, for example, "Carbonated growth. Could a tax that slowed global warming also make a country richer? A recent study holds out that tempting prospect", The Economist, 8 August 1992; "Save gasoline a better way", The New York Times, 7 March 1991; "Louisiana's new environmental tool: using taxes to discourage pollution", The New York Times, 27 February 1991; Hans G. Nutzinger and Angelika Zahrnt (eds.), Fuer eine oekologische Steuerreform. Energiesteuern als Instrumente der Umweltpolitik (In favour of an ecological tax reform. Energy taxes as instrument of environment policy) (Frankfurt am Main, Fischer Taschenbuchverlag, 1990).

## Chapter XIV

# SOCIAL CONSEQUENCES OF ADVANCES IN TECHNOLOGY

The spectacular technological changes of recent years have given rise to a flood of speculation about their economic and social consequences. The potential of the new technologies has evoked visions of extraordinary prosperity and comfort, but at the same time those technologies have inspired vivid apprehensions about technologies-related unemployment and about a widening gulf between industrially advanced and less developed countries.

This range of responses, extending from visions of technological utopianism to deep distrust, has accompanied industrial society for at least 200 years and looking back over the record, one must conclude that both hopes and fears have been justified. If technological growth has been the driving force behind the economic growth that has transformed living conditions throughout the world, it is also true that the social change that has accompanied this transformation has been painful for those whose way of life was wiped out by what Joseph Schumpeter called the creative destruction of economic growth, and true as well that parts of the developing world have been relatively untouched by technological change and remain so to this day. It is only reasonable to expect that recent technological change will have similar mixed impacts - hurting some people in the short run, hopefully benefiting more in the long run (albeit some more than others) and leaving, perhaps, yet others unaffected.

There is a tendency among commentators to consider today's new technologies - especially in the fields of electronics, biotechnology and new materials - so spectacular as to be overshadowing the past completely and ushering in a new era. That tendency was also characteristic of the writings and commentaries of the past, but we now know that economic growth (for all the hyperbole and rhetoric) is a gradual process even when it is highly dynamic.

These qualifications notwithstanding, there is much in the new technologies to capture the imagination and suggest the opening of new vistas, as the following survey of comments and observations will show. It must be stressed, however, that so far there is no evidence of major macroeconomic effects, such as a conspicuous rise in overall productivity. Furthermore, social consequences have on the whole so far eluded measurement: the high rate of unemployment in industrialized countries cannot be ascribed to the new technologies and other consequences tend to be two-edged and difficult to grasp in terms of numbers.

The following account is therefore in the nature of a summary of information about the new technologies, including more or less speculative discussions about their possible effects.

One of the most visible consequences of such advances has been the knitting together of all parts of the world, whether in news-gathering, data flows, financial transactions or the exchange of other types of information. The new technology has effectively broken down national boundaries with regard to the flow of information. Computer-assisted design and manufacture have become an efficient means of producing commodities for discriminating consumers and have probably reduced the comparative advantage of labour-cheap economies in producing certain of those commodities. Numerically controlled machines and computer-controlled tools have changed the skill levels of the labour force, skilling some of its members and deskilling others. Productivity has risen substantially in certain secretarial and clerical jobs, and management is receiving powerful assistance from computers and information systems.

Some of these consequences are likely to affect women adversely. Others are changing organizational structures. Still others are contributing to the decentralization of work in contrast with the factory system, whose tendency to gather workers together in large numbers enabled them to organize as a countervailing power.

The new technology is affecting homes: they are becoming workplaces into which enormous amounts of information can be fed. Through advances in that technology, new types of software are competing with human intelligence so as to be able increasingly to undertake more of the very functions that have been considered unique to that kind of intelligence. The new technology is enabling a whole range of new experiments and forms of data analysis contributing significantly to the advancement of knowledge.

Biotechnology has wide applications in crop agriculture, animal husbandry, the discovery and production of pharmaceutical drugs, the practice of medicine, human reproduction and many other areas. The capacity to alter and otherwise affect genes has created a technology with far-reaching consequences, of which only a few are yet visible. That much of the new knowledge is being discovered and retained (through private ownership) by private corporations enables those corporations to earn fees from every new application. In contrast, green revolution technology was mostly public property and available to farmers at little cost.

The new technology also challenges long-accepted legal norms regarding ownership, as in the case of genes that are taken from a person and altered by a technician, with copies subsequently sold on the market. Similar ethical and legal problems are emerging from the new mechanics of human reproduction. A society's capacity to identify the function of each gene and substitute others enables that society to write in its own preferences with regard to animal and human biology and, eventually, personality. Such practices are starkly contrary to processes of natural evolution and also challenge deeply held humanistic views about equality among humans.

Advances in the material sciences have made feasible the application of some of the above-mentioned technology. At the same time, those advances have caused economies in the consumption of natural raw materials and led to the constitution of substitutes for those materials, in some instances damaging the economic fortunes of producers in developing countries.

## A. Information technology

### 1. Spread of the technology

The core information technology is associated with semiconductor chips and with programmes to instruct them to perform specific functions. Semiconductor chips are silicon wafers on which light or electron beams are used to etch tightly packed miniature electronic circuits. One unique characteristic of chips has been their continuing decrease in cost and increase in capacity. In 1975, a chip had one kilobyte (1K), or 1,000 bytes, of memory. By 1977, this figure had risen to 4K; by 1979, to 16K; by 1981, to 64K; and by 1983, to 256K. In 1990, 4 megabytes (4M) and 16 megabytes (16M) were available and 64 megabytes had already been announced, although their mass-scale production was a few years away. 1/

Nanoelectronics, under development for use when the limits of silicon are reached (in roughly three-chip-generations time, or 5-10 years), promises further and much larger capacities. It could give rise to shirt-pocket supercomputers, as well as memory chips able to store the entire contents of the United States Library of Congress in a 12-inch-wide silicon disk. 2/

In 1991, a 1M chip sold for $4.50, so that 1K of memory, equivalent to that of the first computer (electronic numerical integrator and calculator (ENIAC)), now costs just $0.0045. It is expected that in future, price per memory unit will drop further. 3/ The cost of the information handling and storing power that 40 years ago was available only to a few select scientists has come down to an order of magnitude that makes it affordable by virtually any developing country inhabitant. 4/ Current predictions indicate that price trends of personal computers will go the way of radios and calculators, turning them into widely used, very affordable consumer electronics devices. 5/ If the improvements in micro-electronics technology had occurred in the aeronautics industry, an airplane in 1980 would have carried 500,000 passengers, on an air ticket costing less than one penny, at a speed of 20 million miles per hour. 6/

These characteristics of technology help it to achieve massive penetration into the economy. In 1985, in the United States of America, there were more computers, including those embedded in various devices, than people. In the same year, over 400 million microprocessors, that is, computers on a chip, and 4 million discrete computers were produced world wide. 7/ In 1991, there were some 3 billion computer devices in the world and in the year 2000, there will be about 10 billion, roughly one for each man, woman and child alive. In 1989, chip sales world wide stood at $48.9 billion 8/ and was expected to more than double, to $110 billion, by 1994. In the first half of the 1980s, the world market for software and computing services had doubled, from $28 billion to about $55 billion, and was forecast to reach $163 billion in 1991 and $340 billion in 1996. 9/

Computer devices are also being increasingly interconnected through a rapidly developing and pervasive communications network. Global communications had by 1987 become the world's fastest growing industry. 10/ The emerging Integrated Services Digital Network (ISDN), a vast network of data girdling the world, is developing an interconnected system that is growing at an exponential rate. 11/ Much of this equipment operates in developed countries. The combined Latin American and African market for data transmission equipment, including satellites, constituted 5 per cent of the United States and European share in 1980, dropping to 4 per cent in 1990. 12/

The spread of communications technology is less rapid than the spread of computer-based devices for several reasons. Telecommunications were conventionally delivered by copper wire, which was costly to string along, especially in rural areas, and telecommunications facilities in developing countries were by economic necessity concentrated in urban centres. New technologies based on fibre optics are rapidly replacing copper wire in the industrialized countries. These carry heavy volumes of communications traffic and promise a major transformation within the next decade. That promise has been partially realized in several countries where a large array of services are delivered to the home, providing the consumer with a wide spectrum of options.

In order to use computer technology, telephone systems in developing countries would need to install new digital equipment. One ambitious programme is that using digital technology to connect India's 600,000 villages. 13/ Both fibre optics and digital technology constitute innovations that are expensive to install, so that in the short term their widespread use in developing countries can be expected to be restricted to urban areas.

There are now technologies based on wireless systems that provide communications at relatively reasonable cost. 14/ Techniques of pooling channels to maximize available capacities in radio transmission are being developed in both developed and developing countries including India. Cellular phone technology is being adopted in several developing countries, including Malaysia, as a cost-effective strategy. 15/ Eastern European countries, including Czechoslovakia, Hungary and Poland, are examining cellular systems as a quick and inexpensive solution to the problem of establishing communications facilities. 16/

### 2. Spread in developing countries

The introduction of the new technology in manufacturing is more problematic in developing countries. Even in developed countries, the adoption of some components, such as computer-integrated manufacturing, has been slower than what was envisaged in the 1970s. While there have been some spectacular gains in productivity, those gains have always not been pervasive. The new technology requires a general spread of scientific knowledge and technical know-how among workers. Since that technology advances rapidly and the equipment involved requires adaptation for specific tasks, there is a need for almost continuous training. The use of complex and vulnerable machinery can be sustained only with a stable, reliable, competent, responsible and motivated labour force. Since adequate returns on investments in this equipment can be made only with high-capacity use, significant down time on account of power failure and breakdown in communications and transport networks tends to reduce returns on the investment. For these and many other reasons, the adoption of the new technology in manufacturing can be expected to be quite limited except in a few developing countries (and in selected sectors in these economies). 17/

The Republic of Korea is one of the first three chip manufacturers in the world with some of its core semiconductor technologies, like that involving DRAM (dynamic random access memory) chips, only a few years behind those of Japan. Brazil, China, India and Malaysia also manufacture semiconductors. Some of this manufacturing has occurred primarily with local investment, as in Brazil, China, India and Korea. In other countries, notably Malaysia, the investment has been carried out by transnational corporations. In several countries, computers and computer-embedded devices are being assembled from imported chips.

Cheap information technology devices could supplement the information and knowledge needs of several traditional callings in developing countries. Thus cheap hand-held user-friendly computing devices could advise farmers on the optimal mix of fertilizer, seed and water after the keying in of data about prevailing conditions. Such cheap devices, based for example on the idea of a spreadsheet, could also be used in a variety of economic activities such as retail trading, as is now being done in developed countries. Many traders now use calculators and it is not difficult to imagine that they would profit from using cheap computers.

Personal computers (PCs) are beginning to be used in a variety of tasks in developing countries, most commonly in administration. 18/ Computers have been used for health database management in Thailand and Sri Lanka. In several countries in Africa, computers are being used in fiscal planning and in formulating the national budget. 19/ Expert systems could also supplement the activity of professional workers in many areas, including health, industrial process control and education. 20/ Other recorded uses for expert systems include diagnosis of tropical diseases, health-care decision modelling, agricultural policy analysis and financial modelling of public utilities. Computers and suitable software can also perform the functions of collecting and classifying a large body of knowledge prevalent in societies in developing countries, much of which is still transmitted orally and in danger of rapid extinction as younger generations eschew the callings of their parents. 21/ In fact, expert systems may be the only realistic means of capturing that knowledge in time.

Where telecommunication links exist between developed and developing countries, a new type of global worker, the so-called electronic immigrant, can be expected to emerge. 22/ The precursors of that type of worker under another technology were those who keyed in data for firms in developed countries. As that work is now undergoing automation, with scanners reading the material, such a trend is being partially reversed. The new type of professional worker, telecommuting over thousands of miles, will encompass a spectrum of skills situated at much higher levels. In the United States telemarketing has already been carried out from Jamaica and insurance claims for American firms have been processed in Ireland. 23/ Professionals in relatively cheap labour markets, for example, those of China, India, Jamaica and the Philippines, could be hired to perform remotely a variety of computer-based tasks, including word processing, computer programming, inventory control, telephone-based selling, accounting, some management activities and analytical work on certain scientific problems.

Software costs very little compared with the production of semiconductor chips and computers. In 1990, there were an estimated 300,000 persons engaged in computer software production, and that figure is expected to double by the mid-1990s. 24/ This expansion could very well be siphoned off to developing countries. 25/ An illustrative case is that of software production (in India), which has grown rapidly. In 1990, software exports reached $100 million and were poised to grow further. Although the largest producer was a private sector company with 60 per cent of the share, medium-sized companies were growing at a rate of 72 per cent per annum, and small companies were growing even faster. 26/

### 3. Effects on organizations

Information technology, being pervasive and generic, has changed social relations in the workplace. Some workers using the new technology have come under more rigid control. For example, truck-drivers who enjoyed the freedom of the road have come to be effectively controlled. Computers have been used to monitor use of time and intensity of application to work, for example, by counting the number of strokes a worker produces on a keyboard. 27/

The application of information technology has resulted in a continuation of the process of deskilling associated with mechanization since the Industrial Revolution and, in the opposite direction, has necessitated the adoption of new skills. Thus, print industry workers in developed countries today typically work at a video monitor. Hitherto skilled work, such as typesetting, proofreading and layout, has been replaced by jobs involving lower-level skills. The contrary process of upgrading skills is affecting secretaries, who are now interrogating databases, producing reports, advising customers and otherwise enlarging their spheres of autonomy.

A group especially vulnerable to the process have been women, who account for the vast bulk of clerical staff in developed countries. In the United States, employment in the insurance and banking industries was expected to fall by 40 per cent and 20 per cent respectively between 1980 and 2000. 28/ The majority of those affected would be women. In several areas where women have worked traditionally, they are expected to be displaced by new developments connected, *inter alia*, with voice recognition, optical character recognition and artificial intelligence. 29/

The flexibility provided given by the new technology has allowed certain jobs in developed countries, especially those of women, to be transferred to the home, that is telecommuted. In the new home-computing environment, workers, who are mostly women, are paid by the piece, not by the hour. They earn less than their office counterparts and also do not have the normal benefits that are common to office jobs, entailing a loss of the traditional workers' rights that had been won after decades of struggle. 30/

The widespread adoption of computers in offices has tended to change the structures of organizations. By gaining access to information through a computer, workers can sometimes make decisions that were prviously made by managers. A significant number of jobs have been redesigned and this has led to the performance of several functions by the same person following a parallel acquisition of multiple skills, with many middle-level managers losing their functions and the organizational pyramids flattening further towards a broader base of skilled clerical workers.

Computer-mediated communications in an organization may help to break down hierarchical barriers to dialogue. In the absence of face-to-face interaction, a person communicating through a screen may feel indifferent to status differences and express herself or himself more freely. 31/

The new technology permits entirely new types of interaction between person and machine. 32/ Machines now present humans with new combinations of the real and the fantastic, constituting a qualitative difference with respect to earlier, less imaginative interactions. For example, computer-aided design/computer-aided manufacture (CAD/CAM) could create new metaphors of reality that do not belong in previous human experience. The ability to animate his or her creative endeavours using these new techniques could allow a person to undergo new subjective experiences.

As more services become tradeable across political frontiers using new communication techniques and networks, new elements vital to developing countries will emerge, encompassing questions of cultural identity and vulnerability. 33/

Video cassettes are a powerful means of introducing foreign cultures into countries. The capacity to receive television broadcasts across continents with the help of satellites keeps at least some populations of developing countries in touch with the major broadcasting centres of the world. Although the concept of a television-connected global village was premature in the 1960s, it is becoming very much of a reality now.

The emergence during the last decade of enterprises whose principal business was world-wide television broadcasting testified to the opportunities opened up by the new technology. Pictures from television broadcasts convey the horrors of war, disasters and famine, so that it is now conceivable to speak of the formation of world public opinion in such a way as could not be achieved by previous media. These broadcasts also bring, at least to some parts of the population of developing countries, pictures of well-being in, and of the lifestyles of developed countries, all of which may stimulate a demand for new material goods.

### 4. Employment

The extent to which the new technology displaces jobs and creates them is still uncertain, although it is evident that some skills are displaced and new ones created. There is some evidence that information technology reduces labour input per unit of output. For example, between 1972 and 1977, the Bell System increased its telephone calls by 18 per cent but at the same time laid off 60,000 workers. 34/ In the United States banking industry, several companies required that one human worker be displaced every time an automated teller was put into use. 35/ In the United Kingdom of Great Britain and Northern Ireland, the use of word processors reduced office staff in several companies by up to 50 per cent and in blue-collar work two jobs were lost for each robot used. In the United States automobile industry, each robot displaced 1.7-6.0 workers; and in the 1990s, robots were expected to displace 100,000 workers in the United States. 36/ On the other hand, many jobs have been created with the new technology.

The new technology is being applied over a whole spectrum of economic activities, ranging from professional to white-collar work and from the work of skilled craftsmen to that of unskilled manual labourers. Over the last few years, the areas encroached upon by computer devices have tended to spread to encompass skills of increasingly higher levels. It is useful to list those areas in order to indicate the breadth of the spread.

Some of the first applications of the new technology were in the military. Because the speed at which modern battle occurs makes it impossible for human commanders to keep track unaided of all that is happening and to respond appropriately, battle management expert systems have been used as adjuncts in decision-making. At a lower level, information technology has displaced junior commanders performing virtual staff functions in a military organization. In addition, a whole range of skilled activities of soldiers, sailors and airmen have been informatized with a vast range of chip-based weaponry ranging from automatic guns to automatic sensors, automatic pilots, guided missiles and automatic responses to attacking missiles.

The new technology has changed office work from the highest to the lowest level. A broad range of management skills are being replaced by expert systems. Applications of information technology-based artificial management (AM) include scheduling and forecasting, man management and procurement. 37/ Computers have also been used in long-range business and economic forecasting. Recent artificial intelligence (AI) systems, including neural systems and genetic algorithms, have outperformed human systems in tracking market performance. 38/

At the level of non-routine higher-level banking functions, loan application software - some with neural networks - has replaced human skills. 39/ At the middle-clerical and other office job levels, many existing functions and roles have already been, or are now being, fully or partly performed by machines. Certain routine office work, including clerical functions, has come to be done using desktop computer terminals and such devices as word processors. Developed versions of currently rudimentary voice-driven typewriting systems are expected to come into wide use during the next decade.

In manufacturing, the whole chain of skills is being fully or partly replaced with computers and related equipment. Thus, CAD (computer-assisted design) and CAM (computer-assisted manufacture) have transferred some of the work of engineers to computer programs. In CAD, computer graphics at a terminal are used to design, draft and analyse a product to be manufactured. Among the many successful applications of CAD have been the design of printed circuit boards, aircraft and automobiles, with dramatic gains in the productivity of engineers and architects. 40/

Machinists, who as some of the most highly skilled workers in industry required years of experience to learn their craft, are being replaced by computer numerically controlled (CNC) machines (with computers controlling and guiding milling machines, lathes and drills). CNC techniques of production allow for a high degree of flexibility and adaptability in manufacturing. When used for small batches, these techniques allow production to respond quickly to market demand.

Lower down the hierarchy, robotic devices have fully or partly replaced unskilled workers, cutting costs and often producing, at much less risk to workers' health and safety, better-quality work than earlier. It is forecast that in the 1990s, as many as 40-50 per cent of all workers in the United States will be using daily some sort of electronic terminal. 41/

### 5. Social interactions

Information technology is a generic technology. Its effects will be far-reaching, intruding into almost every economic and social niche. Of all the major technologies to emerge since the Industrial Revolution - steam power, electricity, chemicals and the internal combustion engine - information technology, with the possible exception of biotechnology, will have the most far-reaching effects. Because of its rapid price drop, further microminiaturization and other unique characteristics, the penetration of information technology will be very much more rapid than that of those earlier technologies. As it penetrates different sectors and niches, it is rearranging the several human and material elements that it encounters. As it moves across the social landscape, it is cutting a broad swath across that landscape and reshaping it. In turn, the social landscape is itself moving into the technology, moulding it in particular ways. A dynamic interaction between the two is resulting.

The new technology questions some of the most cherished self-perceptions of humans. Questions are being raised relating to human problem-solving and mental processes, and to what it means to be uniquely human. Some of those questions extend to the core religious and philosophical assumptions on which human society rests. Thus, while in many senses a technology of social liberation, the new technology is ultimately not a comfort-producing one: there are disturbing elements at its core. However, the logic of intertwined social and technological systems is now driving it forward almost inexorably. An important task then would be to influence this most plastic of technologies so that it can reflect the best social aspirations and knowledge systems of the world's different cultures.

## B. Biotechnology

### 1. Uses of new biotechnologies

The new biotechnology, by interfering with the activity of organisms at a deep biological level, uses those organisms to bring forth new products. It differs from traditional biotechnology in that it achieves its objectives by modifying or using the genetic material of organisms in a direct manner, at the level of the cell or gene.

Characterizing biotechnology at the cellular level are the techniques of tissue culture and at the level of the gene, those of genetic engineering. Tissue culture is a relatively cheap technique that allows cells from one plant to propagate thousands of plants having an identical genetic structure. 42/ Also, under the new technology, two or more cells can be fused to become a single cell with characteristics different from the original cells, so as to produce hybrids from organisms that are widely different genetically. 43/

Genetic engineering - also called recombinant deoxyribonucleic acid (DNA) technology - allows for combinations of genes that have been artificially put together and were unknown previously. For example, the process of recombination allows a piece of genetic material, or DNA, from one species to be inserted into the DNA of a second species. 44/ The application of the new biotechnology to the plant kingdom can result in the bringing forth of plants that are resistant to selected diseases, insects and herbicides and have the capacity to grow in selected harsh climates.

Microbial organisms that are genetically engineered will be able to control plant pests and influence the nutrient uptake of plants. 45/ By transgenic techniques, plants can be given genes from bacteria that code for insect-killing proteins, thus ensuring plant protection. 46/ Similarly, plants have been developed that are "vaccinated" against commonly occurring viruses. 47/, 48/ By transferring those genes that confer a nitrogen-fixation ability, a kind of self-fertilization of plants is also possible, with enormous consequences for agriculture, which now uses artificial fertilizers.

In the immediate future, one can also expect to benefit from bacteria and fungi designed to live intimately with plants so as to prevent attacks by pathogens. One can also expect engineered plants that could create their own antibiotic antibodies against pests and diseases. Plants are also being engineered to tolerate specific herbicides so that the herbicides could kill weeds and have no effect on the plants themselves. 49/

Genetic engineering techniques have also been used to improve the nutrient content of foods, for example, their protein composition. 50/ The new technology can change the maturation and ripening cycles of particular plants, permitting longer storage without special facilities. 51/ Through genetic modification, plants have been changed to produce useful products, such as economically important peptides 52/ and proteins. 53/ Through a similar approach, plants are expected to become factories for the production of important pharmaceuticals, such as anticlotting agents and growth hormones, 54/ human serum albumin (HSA) 55/ and antibodies. 56/

Key genetic technological changes that increase productivity of farm animals include those involving bovinesomatotropin (BST), a pituitary hormone in cattle that increases milk production. 57/ Some of the most far-reaching effects of animal biotechnology occurring through developments in animal reproductive technology, including the ability to create (by mixing the genetic endowments even from entirely different species) animals with genetic changes that will help them resist diseases better, yield better-quality products, grow faster and reproduce themselves with greater efficiency. 58/ Animals have also been genetically altered to yield cheap and useful pharmaceutical products, such as human growth hormones in their milk. 59/ Substances such as insulin, tissue plasminogen activator (a blood-clot-removing agent) and factor IX (a substance that is missing in some haemophiliacs) have been produced through this process. 60/

The new biotechnology has widespread applications in the health sector. New vaccines can be developed, using recombinant DNA techniques. There exists the distinct probability of a one-shot vaccine, in which genetic elements drawn from a variety of viruses are strung together, against a spectrum of diseases. 61/ Highly specific, inexpensive diagnostic techniques that are affordable even in poor countries are being developed. 62/

The new technology offers the possibility of avoiding genetic diseases and of developing medicines that are narrowly targeted and without side-effects. Examples of the latter would include monoclonal antibodies that can target specific antigens and have already been used successfully in therapies for a wide variety of disorders, such as paediatric tumours, 63/ in neutralization of the tetanus toxin, 64/ in reduction of mortality among patients suffering from potentially fatal septic shock 65/ and (acting as molecular "scalpels") in removal of the opaque cells after cataract surgery. 66/ This large list illustrates the range of possibilities that exist with monoclonal antibody therapy.

The sharply focused targeting of medicines through genetic means, for example in treating cancers, is also being developed. Tumour-infiltrating lymphocytes that home in on tumour cells 67/ and antibodies that take poisonous chemicals directly to cancer sites, leaving healthy cells intact, 68/ reflect such development. Growth factors, a set of targeted remedies that help heal wounds quickly, smooth wrinkles, destroy cancer cells, restore function to paralysed limbs and generally enhance the immune system, are likely to be derived from products of bioengineering patterned after natural growth factors. 69/

Gene probes identify specific genes, and their major applications are in infectious disease diagnosis, forensic testing, paternity testing and identification of genetically transmitted diseases. In future, they could be used in determining the risk of developing diseases that are of genetic origin and in diagnostic testing for cancers.

The list of medical disorders that have been identified as being of genetic origin has been growing steadily. The making of a detailed map of human genes by the Human Genome Initiative would allow for the systematic and exact identification of most disease-causing genes. With the availability of techniques that could repair those genes, the possibilities for medical intervention would be enhanced dramatically. 70/ The first instance of human gene therapy was approved in 1990. 71/ At the end of 1991, trials of cures for three additional genetic diseases were approved in the United States of America. 72/

The mapping of the human genome now under way may, when once applied and thereby turned into a biotechnology, have a more far-reaching effect on humans than all other biotechnology products. The Human Genome Initiative aims at identifying the approximately 3 billion base pairs and 100,000 genes in the 46 chromosomes that constitute human genetic material. It will constitute a search for the ultimate answers to the chemical underpinnings of human existence. 73/ Several attempts are also being made to map plant genomes, permitting the identification of individual plant genes that could then be transferred from organism to organism for the purpose of replicating desired characteristics.

The new biotechnology may thus dramatically alter the most fundamental biological endowments of plants, animals and humans.

## 2. Spread of applications

Because biotechnology operates through living organisms or their products, its activities are limited to those materials that can be biologically manipulated. The economic applications of biotechnology pervade agriculture, forestry, mining, chemicals, drugs and food, and health care. 74/

The new biotechnology yields an array of products that require less material, energy and labour input than those of earlier technology. 75/ In this sense, it substitutes indirectly for labour. There are possibilities for using biological material such as proteins and other large molecules, rather than silicon, for electronic circuits. 76/ In this event, the new biotechnology will directly substitute for labour.

The biotechnology industry emerged into the commercial field not much earlier than 1980. The forecasts at that time, with their promise of quick profits, were for rapid growth reflected in initial investor euphoria in market economies. 77/ Biotechnology was also the fastest growing scientific discipline world wide in the 1980s, judging by the number of scientific papers published. 78/ Since then, however, only a handful of distinct products have come to market. There had been substantial underestimates of the time to be taken in getting a product to market. One reason for the delay was that time had been needed to procure products' approval for use, taking into account their effects on planetary life, including human life.

In the 1990s, this picture is likely to change. In 1991 alone, as many drugs were expected to enter production as in the entire previous decade. 79/ Accordingly, in the period 1990-1991 biotechnology stocks did not suffer the fate of many others at the New York Stock Exchange. On the contrary: in 1991 in the United States, the leading country in the field, there were 35 biotechnology companies making public offerings, bringing in $1 billion from investors. 80/ Although still burdened with high research and development costs, many biotechnology firms entered the 1990s with sizeable growth in sales and revenue. 81/ Some 75 per cent of biotechnology firms in the United States now have products for sale. Total sales in 1991 exceeded $2 billion. At least one had probably entered the Fortune 500. 82/

New biotechnology firms were widely expected to increase in number in the 1990s. A range of new products were expected in manufacturing, environmental protection and agriculture. Within the first decade of the twenty-first century, the impact of biotechnology in the economic and social field is expected to become comparable with that of information technology. 83/

These broad industry-level projections are being confirmed at the product level. The new biotechnology had its earliest and most significant impact in the pharmaceutical industry. The biotechnology products constituting the initial spectrum in pharmaceuticals were useful in diagnosis, prevention and immunology. These included natural proteins and peptides, which gave useful drugs such as insulin, human growth hormone, interleukins and growth factors. More than 200 diagnostic tests, including the use of monoclonal antibodies, had been developed. 84/ Monoclonal antibodies were quickly catching up, with sales, virtually nil in 1990, rising to an expected $550 million in 1991. Sales of gene probes in the United States in 1988 were estimated at $13 million and forecast to grow at the rate of nearly 70 per cent per annum through 1993. 85/

Biotechnology-derived seeds were likewise projected to have a major impact on agriculture. The value of the market for biotechnology-derived seeds was estimated at $165 million in 1990, with growth to $1.8 billion in 1995 and $5.9 billion in 2001. It was estimated that after 2001 nearly 75 per cent of all major seeds would be biotechnology products obtained through either genetic engineering or tissue culture. 86/ Growth in biotechnological pesticides, created through genetical engineering and microbiological and biochemical means, was scheduled to result in an $8 billion industry by the year 2000. 87/

### 3. Impact on developing countries

The new biotechnology, because of its heavy research and development components and market potential, is at the moment concentrated in developed countries. The advances expected in those countries can have repercussions for some crops in developing countries. However, since research is concentrated mostly on developed country crops, the impact on productivity in agriculture in developing countries is yet small. Biotechnology can be expected to generate products to replace tropical crops now exported from developing countries. 88/

Perhaps not more than 10 developing countries have the capacity to undertake research on genetic engineering. Those countries with a nucleus of competent researchers in plant biotechnology would be able to exploit tissue culture methods on a much larger scale. 89/ However, it is possible to use the products of genetic engineering - seeds, say, that have been genetically engineered elsewhere - in many developing countries.

The development of new seeds through genetic engineering is taking place largely in multinational corporations in developed countries. National research centres and international centres of the kind that spearheaded green revolution technologies are noticeably absent in genetic engineering. 90/ Those that develop new biotechnologies establish private rights to them, with the right to exclude others from using them except through payment of fees. 91/

The dissemination of the new biotechnology thus becomes slower and costlier than it would be if this information were in the public domain. Driven by market forces, private sector research and development efforts are targeted primarily at products in developed country markets and this results in the neglect of research into projects primarily aimed at the domestic market of developing countries. Without a local research and development capacity, the latter group of crops are not likely to benefit much from the new technology. 92/

The new biotechnology presents the agricultural planner with a new option. Despite spectacular gains in yields from improved seeds, the principal approach so far has been to provide heavy infrastructure, including reservoirs or deep wells, irrigation systems and land development to suit the demands of seed material. The new biotechnology working at the level of genes permits the development of seed that meets the demands of the immediate environment. Seed development to suit a given environment is thus an alternative that must be assessed against the development of heavy agricultural infrastructure.

Up to 1990, there were no transgenic crops competing with developing countries' products on the market. However, there were suggestions based on experimental results that genetically engineered rape-seed, tobacco and rubber would be available in five years. Several other clonally propagated crops were expected to be commercially available within the next five years. Clonal propagation was under development for another 35 vegetables, trees, shrubs and flowering plants. 93/

In addition, substances formerly derived from natural plants can now be derived from plant cells propagated in culture. These products would include fragrances, flavours and spices, including vanilla flavouring, cocoa butter and saffron. Of these, only vanilla was near commercial production in 1991. Research was under way on several other products. 94/

With the seed market becoming saturated in industrialized countries, the new markets for the companies concerned are in developing countries. With the increasing concentration of ownership, a few large companies today dominate the production and commercialization of seeds of selected crops. 95/ As they compete in developing countries and introduce a few biotechnologically produced seeds, a shrinkage in genetic diversity is taking place as old seeds are replaced. Many petrochemical and pharmaceutical companies have either completely taken over seed-producing companies or become major shareholders. One result of this is the development of particular seeds that will not be sensitive to the particular herbicide that a given firm manufactures, allowing for the herbicide's exclusive application and hence ensuring the sale of both seed and herbicide by the same company.

### 4. Property rights

In a ruling that was protested by animal welfare environment activists, farmers and religious groups, the United States Patent and Trademark Office ruled in 1987 that all genetically engineered multicellular organisms, including animals but excepting humans, could be trade-protected. 96/ Generally, the area of patents for biological material has become one of great contentiousness. Recently, biotechnological firms have sought patents to genetic material existing naturally but whose process of extraction was discovered by them. 97/ Genentech successfully claimed the exclusive ownership to "natural" TPC (tissue plasminogen activator), a blood-clot-dissolving enzyme that occurs naturally, but the patents for whose extraction remained with the company. 98/

The debate has opened up controversies with legal, moral, social and research overtones. Industry would like patents with the widest possible scope, while an alliance of environmentalists and religious groups sees the patenting of any living thing as immoral. A middle-ground stance has been taken by lawyers, scientists and plant breeders. 99/

The largest set of problems associated with ownership of naturally occurring biological material would come with attempts to patent human genetic material. This could ultimately result in the patenting by researchers working on the Human Genome Project of sections of genetic material as they are decoded. Such patents have been obtained in the United States, even without a knowledge of what the patented sequences actually code for. 100/ No international consensus has emerged on this issue, which will have a profound impact on the entire human species. Opinion has generally been more circumspect in Europe than in the United States of America. In late 1991, the National Ethics Committee in France issued a guideline opposing the patenting of the human genome, declaring it the common heritage of humanity. 101/ It also called for open access to genome data banks.

With work on the Human Genome Project accelerating in the years to come, concerns regarding ownership of and access to the new genetic material become a vital global issue. Such concerns relate to determining what constitutes the common biological heritage of humanity (most of whose members live outside the regions where the genome is being researched) and to providing incentives for the institutions engaged in this vital research. This is an area where the widest possible debate has to be entered into on the most urgent basis.

The concerns are even more far-reaching. The tropical countries have the greatest biological diversity and hence the largest store of naturally occurring genetic material. Special concern has been felt about attempts to extend the scope of intellectual property rights to include those of plant breeders. Some developing countries have objected to the proposal on trade-related aspects of intellectual property rights (TRIPS) in the General Agreement on Tariffs and Trade (GATT), which was seen as neglecting the need to control abusive practices and as impeding the free flow of scientific and technological information. 102/

The effects of the involvement of multinational corporations in the new technologies are also being felt in the field of indigenous knowledge. Developing new biotechnology material requires access to a variety of useful genes. Of the 265,000 species of plants on earth, only 1,100 have been thoroughly studied, and 40,000 probably have medicinal and nutritional uses for humans. 103/ Plant breeders using the new biotechnology will need access to this pool of genetic diversity. Although these plants remain unknown in developed countries, indigenous farmers, pastoralists and traditional healers have identified their uses over the centuries. This knowledge is now being gathered by multinational corporations. The particular gene responsible for a desired property could later be isolated and incorporated in a new genetically engineered plant. Moreover, the patented plant or seed could then be fed back as a commercial product (replacing the existing flora of a particular developing country), possibly into the same groups that had identified the desired trait in the first place. 104/

The knowledge that is patented comes from two sources: the farmer who originally identified the plant's useful properties and the scientist who isolated and incorporated the gene. Under present arrangements, it is only the scientist who is rewarded. This problem is now a subject of deep debate in several United Nations organizations, including the World Intellectual Property Organization (WIPO). It has profound implications for farmers' incomes and the relative global distribution of income. 105/

An imaginative and creative solution to this tension between multinational firms and local knowledge has been attempted recently. In an experiment termed chemical prospecting, Merck and Company and the Government of Costa Rica have teamed up, in a potentially mutually rewarding relationship, to rationally exploit the genetic material in Costa Rica's rain forests. Merck and Company, on its part, had recognized that a vast reservoir of genetic material potentially useful in the development of drugs was disappearing fast, along with the tropical rain forests. Rapid screening techniques now make it possible for a relatively modest investment to yield thousands of extracts. Merck and Company will provide funds for the National Biodiversity Institute of Costa Rica to undertake a programme of chemical prospecting. 106/

Other programmes on similar lines have come into being. A smaller corporation, Shaman Pharmaceuticals, and Conservation International, an environmental group, specifically collect material from tribal groups that have knowledge of the uses of tropical plants. The United States National Cancer Institute supports programmes in chemical prospecting using ethnobotany and is developing models of ownership that would involve sharing of profits with local Governments. 107/ Furthermore, innovative local science-based companies that utilize ethnobotanical knowledge, like, for example, Brazilian Amazon Nature, have already emerged pursuing similar goals. 108/ Novel models seem to be emerging to permit the exploitation of local traditional knowledge, in combination with the strengths of multinationals, in a fairer and less ecologically harmful manner.

The models could enable the profitable use of the talent and skills of scientists in developing countries who are languishing without access to the most basic equipment and literature. They are close to biotechnology's largest source of raw material, namely tropical forests, and have easier access to local knowledge than others. Biotechnology could bring about a synergistic combination of developing country raw material, trained developing country scientists and developed country capital and knowledge. Such a synergistic combination would also have the unintended consequence of increasing the access to resources of developing country scientists and curbing the brain drain.

## 5. Environment

By reducing the use of pesticides and fertilizer, the new technology could reduce polluting chemicals; however, genetic engineering of plants also carries certain ecological risks. Traits from new plant varieties conferring pest resistance, if introduced into other plants through either escape of the engineered crop or crossing of the new plants with wild plants could have a serious impact on cultivated crops. Herbicide-resistant genes could also be exchanged between domesticated plants and wild weeds, resulting in a requirement of larger doses of chemicals to control the newly resistant weeds. 109/ New types of weeds could then emerge and become a threat to agricultural systems. To destroy a weed that had incorporated a gene for herbicide resistance would now require more dangerous chemicals. Similarly, insect-resistant traits might lead to the rapid evolution of pest species. The existence of weeds with a new trait that made them withstand their usual enemies would tend to reduce genetic diversity.

The patenting of plant material from the tropical world will result not only in the removal of plant knowledge from its source but also in the possible subsequent disturbance of the entire ecological niche from which the plant was removed. In a worst-case scenario, but a probable one, the new patented seed would be reintroduced into its area of origin, which was tied to a particular set of chemicals and cultural practices, thereby marginalizing the original holder of the knowledge in question both economically and culturally. Furthermore the introduction of a uniform set of seeds would make the agricultural system highly fragile and susceptible to vagaries of hitherto unknown pests and diseases. This factor, combined with the erosion of existing genetic diversity, could have strong implications for countries that receive the technology. Widespread use of the new biotechnology could speed up the erosion of both bio- and cultural diversity. The challenge in biotechnology would be to maintain bio-diversity and its necessary adjunct, cultural diversity, as the new technology is introduced.

The new technology, through the genetic engineering of new organisms, could also pose a threat to the environment. The threat of this possibility has resulted in strict control over experimentation and release of new organisms in most developed countries. Such strict enforcement in developed countries may encourage companies to seek safe havens in those developing countries that lack awareness of the problems involved and have minimal (or no) control protocols. This would constitute a repetition of earlier practices of using developing countries as test beds for experimental medicines, as well as for the dumping of toxic wastes. Testing of medicines in the developing world also seems to be occurring in the genetics field, as exemplified in the testing of genetically altered vaccines. 110/

In developing countries, there is generally a lack of both public awareness concerning the issues involved and trained scientific personnel. Regulatory mechanisms are vital in developing countries but these have to take into account the twin objectives of encouraging industry and protecting the public interest. Local awareness-raising exercises, combined with international cooperation, appear vital.

### 6. Employment

It is too soon yet to report on the employment effects of biotechnology. In a series of studies, the International Labour Organisation (ILO) has attempted to assess the employment effects of the new biotechnologies in several developing countries. In China, 111/ there have been significant gains with disease-resistant rice, biofertilized peanuts and other grains, as well as potatoes, sugar cane and bananas. In the sampled rural areas, labour absorption in agriculture declined substantially. In Mexico, 112/ tissue culture-generated citrus plants have raised the possibility of more employment and increasing incomes. In Kenya, 113/ where tissue culture techniques have been used with potatoes and tea, those with large farms have taken the lead in applying the technology. Labour use per hectare, land productivity and profitability have all increased significantly. In Malawi, too, these techniques increased labour-intensiveness per unit of land and 24 per cent more labour was employed per hectare of land.

## 7. Biotechnology and ethics

Through the use of amniocentesis and chorionic villus sampling the future diseases, health, parentage and sex of the fetus may be assessed. Because this knowledge can be used to terminate a pregnancy, such diagnostic procedures are assuming the evaluative function of determining those humans that are more valuable than others, and those that would be a potential burden to their community. When further diagnostic procedures - such as those at the level of the gene - become widespread, the list of human traits that could be rectified will constitute a reality.

With the new technology, a total gene screen of embryos has become a distinct possibility. 114/ The use of amniocentesis to test for the sex of the fetus (with subsequent abortion if the sex is female) - a precursor of mass genetic screening - has been adopted in some developing countries. 115/ This could lead to attempts to "perfect" offspring, which would then contain socially desirable characteristics and have undesirable characteristics excised. 116/ The genome, altered by excision of undesirable genes and incision of desirable ones, then becomes in fact a map of society's wishes. A particular society's definitions of the correct, the beautiful and the desirable can, through reproductive technology, be mapped in the embryo. This type of intervention - the writing in of society's preferences with respect to the biological make-up of individuals - calls seriously into question the notion that we are born equal and are not created by society. 117/

As an important social movement, feminism has over the last few decades developed a formal body of literature with a distinct orientation to social problems. However, advances in embryology, tissue transplants and intervention at the point of the creation of human life are now calling into question several of feminism's social assumptions. Some of these key questions have arisen as a consequence of radical intrusions into reproductive processes through such techniques as sex pre-selection, surrogate motherhood, flushing of embryos, in vitro fertilization, surrogate embryo transfer and cloning, and (in the future) genetic manipulations.

Some of these advances are a continuation of a process of liberating women from biological determinism. The new technology increases the capacity of women to break their links with both the animal origins of, and the patriarchal controls over, reproduction. Yet these pro-interventionist arguments are now under attack owing to the elaboration of horror-inducing scenarios concerning control over the reproductive function. It would now be possible for women to sell their reproductive capacity, as embodied, for example, in wombs, ovaries and eggs, as prostitutes had been selling themselves for other purposes.

This feminist dilemma is best illustrated by the highly publicized case of Baby M in the United States. The biological father wanted the responsibility of fatherhood and of caring for the child with his wife. (She had not borne the child.) The surrogate mother, in whose womb the baby had gestated, wanted to care for the child for emotional reasons. 118/ The new techniques of reproduction, then raise general questions of how socially a parent is to be defined. Who are the parents of a child brought forth by in vitro fertilization (from an egg that, donated by Mrs. A, is then combined with a sperm from Mr. B and implanted in the uterus of Mrs. C) and given up for adoption (to Mr. D and Mrs. E)? These complicated social and ethical issues can be expected to intensify and their incidence to increase in the near future, when it will be possible for genetic characteristics themselves to be incised into or excised out of chromosomes.

The social and medical implications of the new technologies have been discussed largely in the developed countries; such discussion has therefore occurred within the context of certain social, cultural and ethical assumptions that may not necessarily be universal. Clearly, wider discussion, especially in developing countries, is called for.

## C. Conclusions

The wave of advances in technology now sweeping developed countries are - as those in steam technology were - of a generic character, and they are having similarly pervasive economic and social consequences. The advances differ in three principal respects, however, from those in earlier technologies. First, they are extremely close to advances in scientific knowledge in a way that the changes behind the Industrial Revolution were not. Consequently, there is close collaboration between universities and research laboratories, and the new inventions. Second, the production, running and maintenance of the new equipment require labour with far more scientific knowledge than earlier. The new technology is therefore unlikely to be available at reasonable cost in societies where the recent disciplines of molecular biology, microbiology, biochemistry and modern physics are not being firmly pursued. Third, the new technology changes very fast. Equipment and the programmes to run them become obsolete in two to five years, and rapid obsolescence calls for new investment. These factors handicap developing countries in the adoption of the new technology. Among those countries, the ones with high investment ratios and a strong science and technical education framework stand to gain while others lag behind.

In general, research and development expenditure in advancing new technology is quite high. Where Governments do not finance research and development, none but the largest corporations can afford the outlay on developing the core technology. There have been tendencies among even the largest corporations to pool resources in order to deal with some of the most advanced work. The average small- or medium-scale enterprise in developing countries cannot participate in this core development of technology. In fact, there may be a legitimate role for Governments in financing some of these activities. However, small-scale enterprises in developing countries could do exceedingly well in writing software and applying certain techniques in biotechnology.

Private sector enterprises are prominent in developing, with the new biotechnology, both new seeds responsive to specific chemicals and pharmaceutical drugs. The rights of those enterprises to intellectual property do provide incentives to innovation. Keepers of traditional knowledge also have valid claims to the payment in connection with such innovation. It is still a matter of debate where the interests of the public lie.

Information technology has knit the world closer together. News of events travels instantaneously, creating a bond between diverse peoples in a manner inconceivable a generation ago. Currency transfers take place on a massive scale. Prices in the principal share and commodity markets are linked very closely. All these developments have eroded national boundaries separating economies and cultures. They have also reduced the authority of Governments, increased the power of multinational enterprises and strengthened solidarity among non-governmental organizations.

Ownership of multinationals themselves is traded around the globe and there is a decreasing likelihood of a company's being identified with exclusive ownership in one country. Widespread telecommunication links and rapid and inexpensive printing have similarly undercut the power of Governments to control the exchange of information among citizens. On the other hand, a capacity to maintain massive files of information that can be rapidly consulted through computers has given Governments opportunities for greater control over citizens. On balance so far, it seems that citizens have prevailed over Governments.

The new technologies in general support sustainable development, requiring, as they do, much less energy and much fewer materials per unit of production than earlier technologies. Miniaturization economizes the use of material, and material that is informatized is far more productive than material that is not. There are, however, threats to the maintaining of the globe's bio-diversity because of tendencies to introduce high-paying single breeds of plants and animals in place of the present diversity. The new technologies will significantly change the composition of existing trade patterns.

The new technology raises very difficult moral and ethical questions regarding fundamental relationships, for example, between parents and children because it raises unprecedented questions about reproduction and the raising of children. It also makes it potentially feasible to write society's current preferences into the genetic make-up of a population in a manner hitherto undreamt of.

The two technologies discussed above are poised to have major impacts on economic, social and ethical issues. Before such pervasive effects are realized, it is necessary that those technologies be, as widely as possible, the subject of intensive discussion.

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# Chapter XV

## NARCOTIC DRUG, TOBACCO AND ALCOHOL ABUSE

Narcotic drugs, tobacco and alcohol satisfy a persistent consumer demand. The vast majority of people get by without using any of them and most people do not abuse them. Society's concern is with the abuse of these substances, which brings numerous personal and social problems. Although no statistical evidence can be adduced, exports of narcotic drugs must constitute a source of substantial export earnings to some countries.

Such abuse has been associated with several illnesses, including hepatitis, tuberculosis, cardiovascular diseases, cirrhosis, neuropsychiatric disorders, disinhibition and sexually transmitted diseases, as well as complications in pregnancy, violence and suicide. Contaminated syringes used intravenously to inject narcotic drugs are a principal means of infection with the human immunodeficiency virus (HIV), especially in urban centres in developed countries. The abuse of drugs and alcohol constitutes one of the main causes of impairment of social competence and performance. Among otherwise healthy young people, behavioural problems associated with substance abuse are currently among the main reasons for interrupted social and intellectual development. In industry and education, substance abuse accounts for more work days lost than any single disease and is a major cause of substandard occupational performance; on the road and in the home, it has become the leading cause of accidents and injuries. It has also become a critical factor in family disorganization and breakdown, the economic and social costs involved in chronic substance abuse being a major burden on family resources. Narcotic drug abuse and trafficking are major forces behind the prolific growth in crime, especially in producing countries and major urban centres where narcotic drugs are distributed and consumed. In developed countries, crime related to drug trafficking and consumption is most visible in urban centres, among the poor in particular, contributing to what has been termed "urban decay".

The production and distribution of alcohol, tobacco and narcotic drugs occupy a not inconsiderable proportion of the labour force in many countries. In several countries, taxes on alcohol and tobacco are a significant proportion of government tax revenue.

The three major approaches to these problems have been to reduce demand, intercept trafficking, distribution and consumption, and discourage or eradicate the production of the substances, especially narcotic drugs. High taxes on tobacco and alcohol have been not only an important source of government revenue but also a deterrent to consumption. Public education has been another powerful instrument to reduce demand. Therapeutic measures to discontinue consumption and to rehabilitate those addicted to drugs, alcohol and tobacco are also important means of cutting down demand. Most Governments have made the production, trade and consumption of narcotic drugs illegal, punishable, in some instances, by death. Governments in producing countries, often with the assistance of those in consuming countries, have taken strong measures to eradicate the production and manufacture of narcotic drugs and to intercept trafficking. There are major debates regarding priorities to be attached to each of these approaches, especially in dealing with narcotic drug problems.

A reduction in demand, whether by education or compulsion, would make the production and distribution of these commodities uneconomic and is therefore the ideal solution. Reducing output merely raises prices if the demand remains unrestrained, limiting consumption to those whose budgets permit the higher outlay. Inevitably, there will be a search for cheaper substitutes. Any attempt by Governments to limit output carries with it an obligation to provide alternative sources of income to producers. Where taxes on the consumption of alcohol and tobacco are important sources of government revenue, other sources have to be found. If the production, distribution and consumption of narcotic drugs were made legal, taxes on these activities would contribute to government revenue. That would also free resources currently spent on the enforcement of laws against these activities. However, in the case of narcotic drugs, unlike alcohol and tobacco, there is an understanding that the dangers of widespread use and addiction are too high for such a course of action to be taken.

This chapter provides an overview of the global situation of drug abuse, both legal and illegal. It gives estimates of the consumption of alcohol, tobacco and narcotic drugs and psychotropic substances and assesses the negative social and economic consequences arising from such consumption. It then discusses measures to reduce the demand for alcohol, tobacco and narcotic drugs and psychotropic substances, control production and supply and intercept traffic. Finally, it reviews bilateral, interregional and international action against drug abuse.

First of all, however, it is useful to note that the quality of the statistics of production and consumption of narcotic drugs, alcohol and tobacco is very uneven. Since the production, trade and consumption of narcotic drugs is mostly illegal, the quality of the statistical data on these phenomena depends on the extent to which surveys are conducted or drug-related registers are maintained. Although the number of Governments reporting information has increased each year since 1985, many of them, especially in developing countries, lack the resources, techniques and trained personnel to establish a less incomplete and more reliable database.

Many countries publish details of the quantities of alcohol produced and imported. 1/ However, in some countries, much of the alcohol consumed is not included in official figures since it is made at home rather than in large-scale commercial establishments. 2/ In Norway, for example, a substantial proportion of the alcohol consumed is produced illegally. The scale of such unrecorded production is open to conjecture and the official data give only a partial picture. In addition, tourism is so important in some countries that a considerable proportion of the alcohol produced is consumed by overseas visitors rather than the local population.

Data on tobacco consumption are least unreliable when tobacco products are cleared through a government taxation process. In developing countries, when processing takes place in the informal sector (e.g., the bidi industry in South Asia), estimates of production and consumption remain crude and unreliable. Estimates of consumption are more reliable when factory production and net imports are the main sources of supply. Even then, widespread smuggling and black market trade dilute the quality of statistics.

## A. Consumption patterns and trends

### 1. Narcotic drugs

Despite encouraging developments and more effective law enforcement, narcotic drug abuse has continued to rise. 3/ Young people are the main abusers of illicit drugs. Volatile solvents tend to be abused by 8-20-year olds; cannabis and psychotropic substances by the 16-35 age group; heroin and coca-type drugs in general by 20-35-year olds. These age groups do not differ substantially among the major regions of the world. 4/ Drug abuse is most common among males in urban areas, the proportion of women being approximately 30 per cent in Europe, North America and Oceania and generally below 10 per cent in the rest of the world. In many parts of the world a pattern of multiple drug abuse is emerging. Different drugs are being employed at the same time, consecutively, or haphazardly, as dictated by availability and market forces.

Table XV.1 shows quantities of different narcotic drugs seized in the world during the period 1985-1990. Cannabis, in its various forms, remained the most widely abused drug in the world. Between 1985 and 1990, the amount of cannabis herb/plant seized quadrupled and that of cannabis resin almost doubled. Seizures of cocaine quintupled in the same period; those of heroin almost doubled between 1985 and 1988 and stabilized in 1988-1990. The type of drugs seized differs among countries and regions. The overall trends, by type of drug and by region, can be seen in figures XV.1-5. If quantities seized by government are any guide, drug abuse in Africa increased during the five-year period. However, a significant part of the increase may be because Africa is being used as a new trading route and because of greater vigilance on the part of authorities. The commercial cultivation and sale of cannabis is a relatively new phenomenon. Cannabis, in combination with other substances, continued to be one of the most commonly abused drugs in Africa. Cannabis abuse has been decreasing in North America, Latin America and the Caribbean, and Asia and the Far East, but it has increased in Africa (see fig. XV.1), Europe and the Near and Middle East (see fig. XV.2). Cocaine abuse decreased in North America between 1989 and 1990 but this was counterbalanced by increasing abuse in Latin America and the Caribbean (see fig. XV.3). In Europe, cocaine seizures in 1990 more than doubled to 17 tons, from 8 tons the previous year.

Trafficking routes have proliferated through new countries and regions, and many more countries are now being used for transiting drugs and precursors. Seizures from transport international rontier (TIR) trucks on the Balkan route increased dramatically in 1990. The political changes in Eastern Europe aggravated the situation by providing transit traffic with new alternative entry points to Western Europe. Much of the heroin from the "Golden Triangle" (northern Thailand, the Lao People's Democratic Republic and northern Myanmar) was shipped out through China and north-eastern India. 5/ Opium was available in abundance in Afghanistan and was processed in makeshift mobile laboratories operating in the Afghanistan/Pakistan border areas and shipped out of Afghanistan, mainly through the Islamic Republic of Iran and Pakistan. 6/

Table XV.1. Quantities of drugs reported seized world wide, 1985-1990

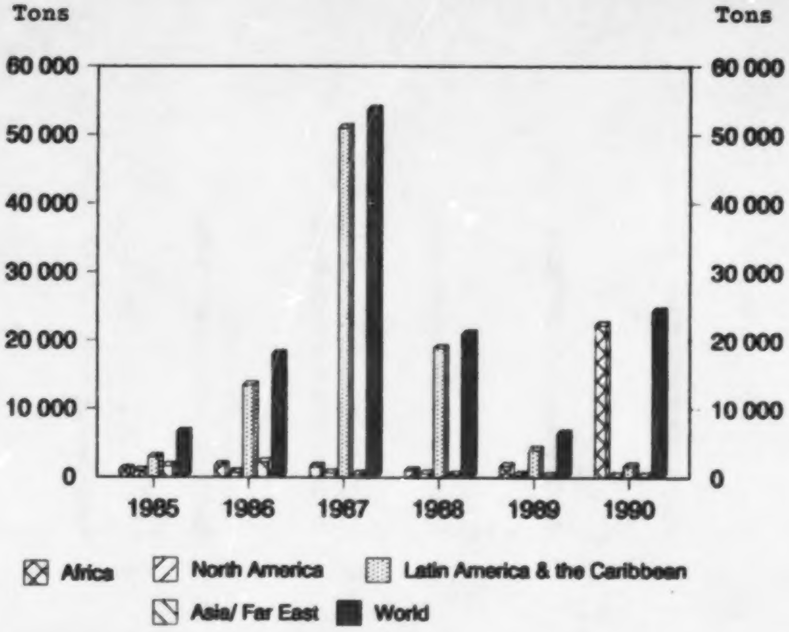
(Tons)

| Drug | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|---|---|---|---|---|---|---|
| Cannabis herb/plant | 6 548 | 17 999 | 53 634 | 20 928 | 6 316 | 24 265 |
| Cannabis resin | 362 | 439 | 453 | 477 | 454 | 639 |
| Cannabis liquid | 1 | 0 | 1 | 1 | 1 | 1 |
| Cocaine | 56 | 128 | 152 | 213 | 258 | 286 |
| Heroin | 14 | 15 | 17 | 24 | 24 | 23 |
| Opium | 41 | 52 | 57 | 92 a/ | 41 | 36 |

Source: Division of Narcotic Drugs, United Nations Office at Vienna.

a/ Including 30 tons of liquid opium reported by the Islamic Republic of Iran.

Figure XV.1. Cannabis herb/plants: quantities reported seized, 1985-1990



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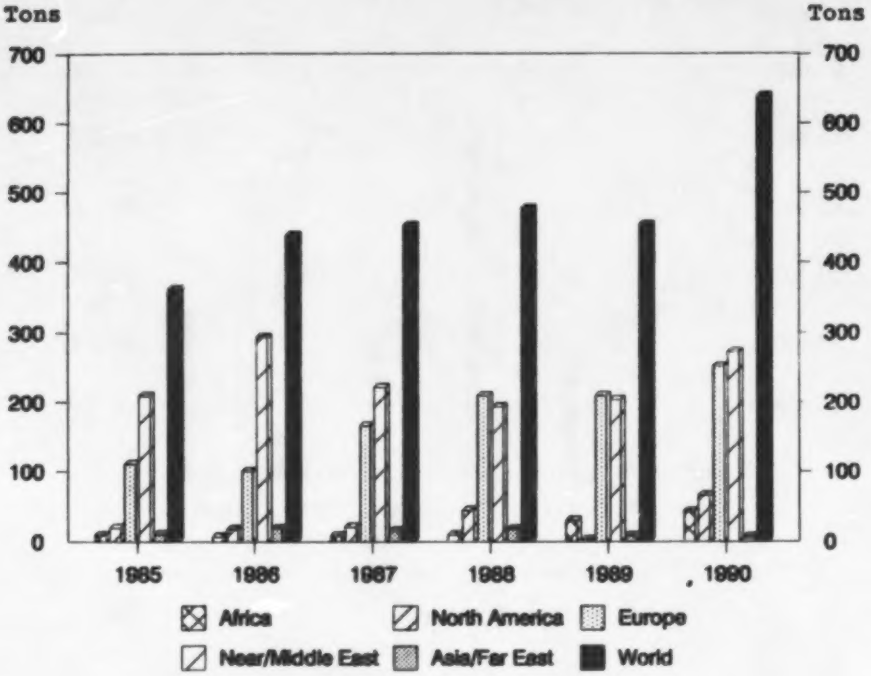
Source: Division of Narcotic Drugs, United Nations Office at Vienna.

Figure XV.2. Cannabis resin: quantities reported seized, 1985-1990



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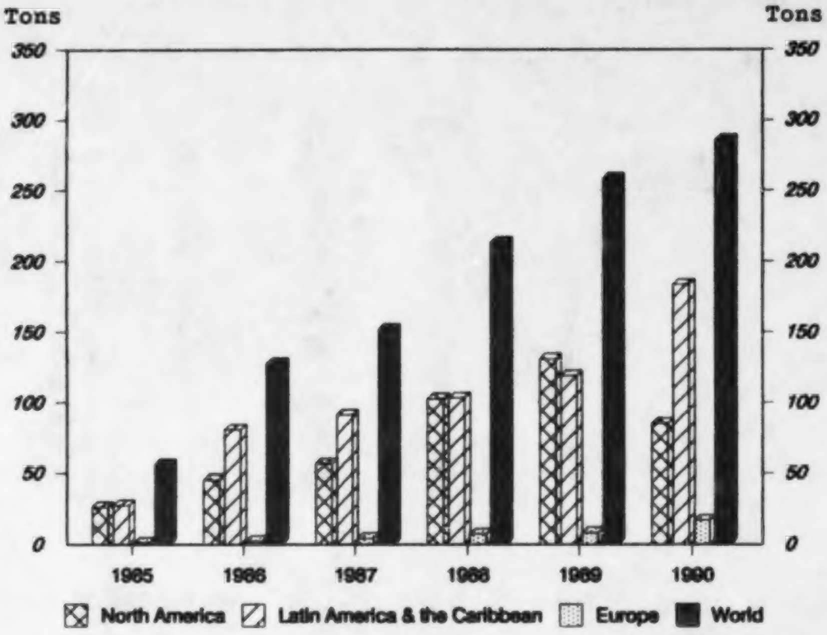
Source: Division of Narcotic Drugs, United Nations Office at Vienna.

Figure XV.3. Cocaine: quantities reported seized, 1985-1990



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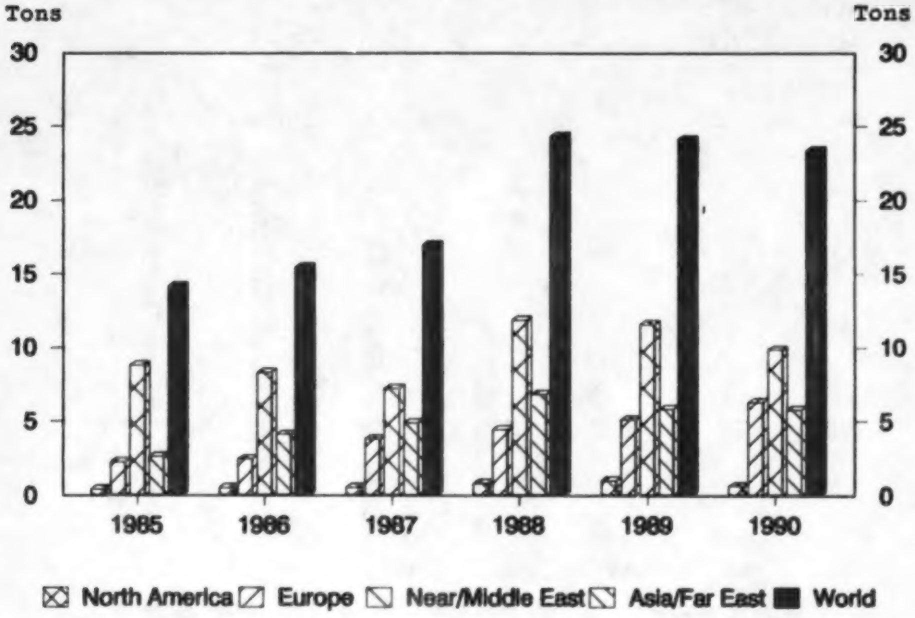
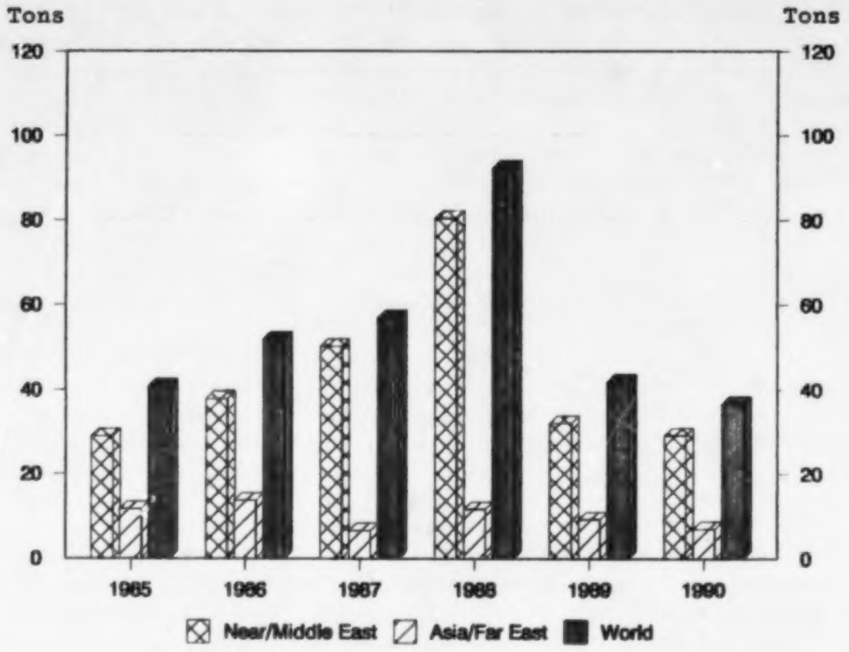
Source: Division of Narcotic Drugs, United Nations Office at Vienna.

Figure XV.4. Heroin: quantities reported seized, 1985-1990



Source: Division of Narcotic Drugs, United Nations Office at Vienna.

Figure XV.5. Opium: quantities reported seized, 1985-1990



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Source: Division of Narcotic Drugs, United Nations Office at Vienna.

Opiate abuse is a serious problem in Europe, the Near and Middle East and Asia and the Far East. Abuse of heroin showed a decreasing trend in North America, the Near and Middle East and Asia and the Far East (see figure XV.4). In Europe, heroin abuse increased during the period 1985-1990. The traditional abuse of opium decreased in the Near and Middle East and Asia and the Far East (see figure XV.5). Africa continued to be an expanding market for opium, heroin and cocaine. Attractive selling prices, several times lower than those found in Western countries, were deliberately established in Africa. 7/ Most of the heroin seized originated in South-East and South-West Asia and a smaller amount came from West Asia. South American drug trafficking cartels were also seeking to develop a cocaine market in Africa as they have done in Europe and other regions world wide.

### 2. Alcohol

Alcohol is by far the most widely used psychoactive (mind-altering) drug. Considerable variation is found from one society to another in habits and patterns of drinking, which differ in frequency, beverage choice, amounts consumed, and the context of drinking, including the location, social setting and occasion.

Table XV.2 shows the per capita consumption of alcohol by people over 15 years of age in 1970 and 1988. In 1988, per capita alcohol consumption levels were highest in France, Luxembourg and Spain. There seems to be a distinct tendency for per capita alcohol consumption to have fallen from the high levels of 1970. In 1988, per capita consumption had fallen in some 14 developed countries and 9 developing countries. Consumption fell in Australia, Austria, Canada, France, the former Federal Republic of Germany, Italy, New Zealand, Portugal, Spain, Sweden, Switzerland, Turkey, the former Union of Soviet Socialist Republics and the former Yugoslavia among the developed countries, and Algeria, Argentina, Chile, Cuba, Israel, Mexico, Morocco, Peru and Tunisia among the developing countries. Alcohol consumption and alcohol-related problems in the former Soviet Union are now lower than in many Western industrial countries. Per capita alcohol consumption, which rose from 3.9 litres in 1960 to 9.4 litres in 1970, fell to 4.8 litres in 1988. Evidently, the campaigns initiated by the Government bore fruit. 8/ The rest of the countries (19 developed and 7 developing) showed an upward trend in alcohol consumption. There was also a tendency towards a convergence among developed countries in the mix of alcoholic beverages consumed.

Part of the explanation for the rise in alcohol consumption in developing countries lies in rising incomes, especially in Asia, where there has been continued economic growth. Excessive alcohol use has been apparent under conditions of rapid positive socio-economic change. 9/ In this context of increased resources, alcohol may serve as a symbol of status change, and drinking patterns may be adopted which emulate those of higher status groups. With rapid increases in income, previously effective social controls and regulatory norms become inoperative. An important role has been played by the tendency towards cultural homogenization in the world. One important consequence of this international spread of cultural influences has been that whole cultures and populations which had little former experience with alcohol are in the process of adopting drinking habits. 10/

### Table XV.2. Per capita beer, wine, spirits and total alcohol a/ consumption, 1970 and 1988

(Litres per year per person over 15 years of age)

| Country | Beer | | Wine | | Spirits | | Total alcohol | |
|---|---|---|---|---|---|---|---|---|
| | 1970 | 1988 | 1970 | 1988 | 1970 | 1988 | 1970 | 1988 |
| Developed countries | | | | | | | | |
| NORTH AMERICA | | | | | | | | |
| United States | 97.2 | 114.5 | 6.9 | 11.0 | 3.99 | 3.08 | 9.31 | 9.62 |
| Canada | 105.7 | - | 5.9 | - | 3.10 | - | 9.29 | - |
| EUROPE | | | | | | | | |
| Austria | 129.9 | 143.7 | 45.5 | 40.1 | 1.84 | 1.77 | 13.82 | 12.07 |
| Belgium | 174.2 | 144.6 | 20.8 | 30.5 | 1.74 | 1.85 | 11.71 | 12.20 |
| Bulgaria | 47.4 | 84.2 | 27.1 | 28.5 | 3.10 | 3.54 | 8.70 | 11.14 |
| Cyprus | 23.7 | 67.3 | 12.2 | 18.3 | 2.24 | 3.33 | 4.93 | 8.93 |
| Czechoslovakia | 184.4 | 171.1 | 19.2 | 18.0 | 3.11 | 4.34 | 11.05 | 11.32 |
| Denmark | 140.9 | 146.2 | 6.6 | 14.9 | 1.65 | 1.76 | 8.83 | 11.83 |
| Finland | 63.2 | 91.5 | 4.4 | 6.8 | 2.40 | 3.86 | 5.87 | 9.01 |
| France | 55.1 | 49.0 | 145.5 | 92.5 | 3.07 | 3.09 | 21.60 | 16.63 |
| German Democratic Republic | 125.9 | 176.5 | 6.6 | 14.9 | 3.42 | 6.42 | 8.03 | 13.58 |
| Germany, Federal Republic of | 183.2 | 168.2 | 20.8 | 30.5 | 3.91 | 2.48 | 13.38 | 12.24 |
| Greece | 12.5 | 50.0 | 53.3 | 40.0 | - | - | 7.07 | 7.25 |
| Hungary | 75.2 | 127.8 | 47.7 | 27.8 | 3.42 | 5.70 | 11.52 | 13.29 |
| Iceland | 19.7 | 24.0 | 2.6 | 9.1 | 3.33 | 3.20 | 4.78 | 5.73 |
| Ireland | 145.8 | 134.3 | 2.5 | 9.4 | 2.12 | 2.36 | 8.55 | 8.61 |
| Italy | 15.1 | 28.7 | 151.6 | 75.7 | 2.40 | 1.22 | 18.27 | 10.98 |
| Luxembourg | 167.1 | 141.2 | 48.7 | 71.1 | 2.50 | 3.05 | 13.42 | 15.85 |
| Netherlands | 78.6 | 101.6 | 7.1 | 18.0 | 2.79 | 2.56 | 7.67 | 10.12 |
| Norway | 49.1 | 63.7 | 3.1 | 7.9 | 2.08 | 1.44 | 4.80 | 5.19 |
| Poland | 42.4 | 41.6 | 7.6 | 10.4 | 4.32 | 6.22 | 7.30 | 9.59 |
| Portugal | 15.9 | 67.2 | 102.1 | 73.4 | 0.70 | 1.01 | 13.94 | 13.16 |
| Romania | 29.2 | 56.0 | 31.2 | 37.3 | 3.24 | 2.67 | 8.51 | 10.00 |
| Spain | 53.5 | 88.1 | 85.4 | 60.8 | 3.94 | 3.85 | 16.81 | 15.51 |
| Sweden | 72.8 | 66.8 | 8.1 | 14.8 | 3.34 | 2.30 | 7.34 | 6.71 |
| Switzerland | 101.9 | 82.9 | 54.4 | 60.1 | 2.52 | 2.40 | 13.90 | 13.25 |
| Turkey | 2.2 | 6.3 | 1.5 | 0.8 | 0.50 | 0.32 | 0.86 | 0.63 |
| United Kingdom | 133.7 | 137.3 | 3.8 | 14.0 | 1.24 | 2.23 | 6.71 | 9.14 |
| Yugoslavia | 39.4 | 63.2 | 39.9 | 32.9 | 4.37 | 2.11 | 11.13 | 9.21 |

### Table XV.2 (continued)

| Country | Beer | | Wine | | Spirits | | Total alcohol | |
|---|---|---|---|---|---|---|---|---|
| | 1970 | 1988 | 1970 | 1988 | 1970 | 1988 | 1970 | 1988 |
| OCEANIA | | | | | | | | |
| Australia | 170.4 | 145.0 | 12.3 | 24.5 | 1.45 | 1.65 | 11.41 | 10.90 |
| New Zealand | 171.3 | 149.6 | 8.3 | 19.2 | 1.60 | 1.69 | 11.18 | 10.00 |
| USSR | 25.4 | 26.4 | 22.0 | 8.5 | 5.49 | 2.40 | 9.42 | 4.80 |
| Developing countries | | | | | | | | |
| AFRICA | | | | | | | | |
| Algeria | 7.8 | 2.8 | 1.3 | 1.9 | - | - | 0.56 | 0.31 |
| Morocco | 4.8 | 3.6 | 2.8 | 2.8 | - | - | 0.56 | 0.52 |
| South Africa | 20.5 | 78.3 | 15.5 | 13.7 | 2.25 | 1.66 | 5.08 | 7.23 |
| Tunisia | 7.2 | 6.0 | 5.7 | 5.3 | - | - | 1.11 | 1.00 |
| ASIA | | | | | | | | |
| Israel | 15.5 | - | 5.3 | - | 1.04 | 0.00 | 2.39 | 0.00 |
| Japan | 37.0 | 59.0 | 0.4 | 1.1 | 1.41 | 3.00 | 6.05 | 8.00 |
| LATIN AMERICAN AND THE CARIBBEAN | | | | | | | | |
| Argentina | 22.0 | 23.5 | 131.1 | 80.9 | 0.00 | 0.72 | 16.86 | 11.59 |
| Brazil | 18.9 | 50.6 | 3.2 | 2.3 | - | - | 1.25 | 2.81 |
| Chile | 29.3 | 30.0 | 66.4 | 50.7 | - | - | 9.51 | 7.54 |
| Colombia | 63.0 | 90.6 | - | - | - | - | 3.15 | 4.53 |
| Cuba | 26.2 | 42.5 | 1.4 | 0.0 | 1.27 | 0.00 | 2.70 | 2.13 |
| Mexico | 53.9 | 65.5 | 0.5 | 0.3 | 1.31 | 0.00 | 4.07 | 3.28 |
| Paraguay | 14.1 | 57.6 | 3.7 | 3.2 | - | - | 1.11 | 3.22 |
| Peru | 32.9 | 72.9 | 2.1 | 1.0 | 2.55 | 0.00 | 4.36 | 3.73 |
| Uruguay | 33.8 | 28.4 | 36.1 | 37.8 | - | - | 5.97 | 7.70 |
| Venezuela | 93.4 | 123.0 | 0.0 | 1.1 | - | - | 4.72 | 6.23 |

Source: Nicholas Vanston, "Patterns and trends in alcohol consumption: a statistical survey", Technical Paper No. 1, prepared for the Expert Meeting on the Negative Social Consequences of Alcohol Use, Oslo, 27 August-1 September 1990.

a/ Litres of pure ethanol.

There are other long-term changes in patterns of alcohol consumption. In the Netherlands, for example, alcohol was drunk mainly in public bars before 1940, but since then drinking at home has become increasingly popular. Now, most alcohol (about 75 per cent) is consumed at home. 11/ Since around 1960, drinking has also spread to a number of new cultural and social situations, and even occurs, although not often, at school and at work. 12/ Groups which earlier had been more or less excluded from drinking by social custom have now been recruited to the drinking population. Chief among these are women, teenagers and, in some countries, rural residents. 13/ Abstinence among women has decreased dramatically in many countries, and in a number of settings young people also have increased drinking. While alcohol consumption and alcohol-related problems are beginning to level off in some developed countries in Europe, there are signs of increases in a number of developing countries in Africa, Latin America and the Caribbean, and the Western Pacific.

### 3. Tobacco

Among developed countries, cigarette consumption per adult, between 1970 and 1985 (see table XV.3), fell in 13 and increased in 15 countries. The increase in per capita consumption was higher in Greece (57 per cent), Italy (39 per cent) and Spain (32 per cent) than in other countries. Two countries with the sharpest decrease were the Netherlands and the United Kingdom of Great Britain and Northern Ireland (30 per cent each). During the same period, in 132 developing countries, consumption of cigarettes per adult rose; it fell in 33 countries. The increase in consumption was highest in Asia, followed by Africa and Latin America. Per capita consumption rose more than 100 per cent in Afghanistan (233 per cent), Egypt (195 per cent), the Syrian Arab Republic (170 per cent), Cameroon (144 per cent), the Lao People's Democratic Republic (133 per cent), Indonesia (119 per cent) and Malawi (105 per cent). Sharp decreases were recorded in Zimbabwe (53 per cent), Réunion (42 per cent) and Jamaica (35 per cent). Per capita cigarette consumption in developing countries is still much lower than in developed countries. However, the rate of growth of consumption is higher in many developing countries, posing problems for public health planners.

There is much epidemiological evidence, especially from the United States of America, showing close relationships between the risk of lung cancer and the number of cigarettes smoked per day, the degree of inhalation and the age at which regular smoking began. Figure XV.6 shows lung cancer mortality ratios for males, by the number of cigarettes smoked per day. For those who smoked more than 40 cigarettes per day, the risk of dying of lung cancer was 24 times greater than among non-smokers. Even those who reported "just puffing" on cigarettes had a significantly increased risk of lung cancer mortality than non-smokers (see figure XV.7). Those who reported the degree of inhaling as "none" or "slight", experienced a risk of developing lung cancer that was eight times greater than that of non-smokers. The relative risk increased to 17 for those who inhaled deeply. The risk of developing lung cancer was greatest for those who began smoking at an early age (see figure XV.8). Using more sophisticated statistical models, it has been shown that duration of smoking is the strongest determinant of the rate of lung cancer risk. 14/

## Table XV.3. Apparent adult per capita cigarette consumption, 1970 and 1985

| | 1970 | 1985 | Per cent change |
|---|---|---|---|
| Developing countries or areas | | | |
| AFRICA | | | |
| Algeria | 890 | 1 590 | 79 |
| Angola | 500 | 530 | 6 |
| Benin | 850 | 740 | -13 |
| Cameroon | 250 | 610 | 144 |
| Cape Verde | 210 | 210 | 0 |
| Central African Republic | 240 | 280 | 17 |
| Congo | 500 | 920 | 84 |
| Côte d'Ivoire | 720 | 710 | -1 |
| Egypt | 630 | 1 860 | 195 |
| Ethiopia | 60 | 60 | 0 |
| Ghana | 340 | 380 | 12 |
| Guinea-Bissau | 20 | 30 | 50 |
| Kenya | 430 | 550 | 28 |
| Liberia | 390 | 450 | 15 |
| Libyan Arab Jamahiriya | 2 560 | 2 950 | 15 |
| Madagascar | 240 | 450 | 88 |
| Malawi | 190 | 390 | 105 |
| Mauritius | 1 260 | 1 700 | 35 |
| Morocco | 690 | 1 070 | 55 |
| Mozambique | 500 | 430 | -14 |
| Niger | 100 | 100 | 0 |
| Nigeria | 280 | 370 | 32 |
| Réunion | 1 620 | 940 | -42 |
| Senegal | 700 | 610 | -13 |
| Sierra Leone | 420 | 830 | 98 |
| South Africa | 1 360 | 1 550 | 14 |
| Sudan | 190 | 130 | -32 |
| United Republic of Tanzania | 350 | 330 | -6 |
| Togo | 480 | 460 | -4 |
| Tunisia | 1 230 | 1 470 | 20 |
| Uganda | 290 | 260 | -10 |
| Zaire | 330 | 210 | -36 |
| Zambia | 500 | 400 | -20 |
| Zimbabwe | 1 060 | 500 | -53 |
| Average | 599.41 | 707.94 | 18 |

### Table XV.3 (continued)

| | 1970 | 1985 | Per cent change |
|---|---|---|---|
| Developing countries or areas | | | |
| ASIA AND THE PACIFIC | | | |
| Afghanistan | 15 | 50 | 233 |
| Bandladesh | 190 | 270 | 42 |
| China | 1 200 | 1 590 | 33 |
| Fiji | 1 320 | 1 600 | 21 |
| India | 190 | 160 | -16 |
| Indonesia | 480 | 1 050 | 119 |
| Iran (Islamic Republic of) | 780 | 620 | -21 |
| Iraq | 1 330 | 980 | -26 |
| Israel | 1 940 | 2 310 | 19 |
| Jordan | 1 280 | 1 700 | 33 |
| Korea, Democratic People's Republic of | 1 200 | 1 180 | -2 |
| Korea, Republic of | 2 140 | 2 660 | 24 |
| Lao People's Democratic Republic | 210 | 490 | 133 |
| Lebanon | 2 890 | 4 800 | 66 |
| Malaysia | 1 440 | 2 256 | 57 |
| Myanmar | 95 | 150 | 58 |
| Nepal | 170 | 150 | -12 |
| Pakistan | 630 | 660 | 5 |
| Philippines | 1 120 | 1 910 | 71 |
| Sri Lanka | 420 | 500 | 19 |
| Syrian Arab Republic | 760 | 2 050 | 170 |
| Thailand | 760 | 900 | 18 |
| Turkey | 1 790 | 1 970 | 10 |
| Viet Nam | 830 | 670 | -19 |
| Average | 1 007.83 | 1 333.74 | 32 |
| LATIN AMERICA AND THE CARIBBEAN | | | |
| Argentina | 1 730 | 1 780 | 3 |
| Barbados | 1 150 | 1 380 | 20 |
| Bolivia | 300 | 330 | 10 |
| Brazil | 1 310 | 1 700 | 30 |
| Chile | 1 080 | 1 000 | -7 |
| Colombia | 1 670 | 1 920 | 15 |
| Costa Rica | 1 680 | 1 340 | -20 |
| Cuba | 4 000 | 3 920 | -2 |
| Dominican Republic | 1 100 | 980 | -11 |
| Ecuador | 700 | 880 | 26 |
| El Salvador | 950 | 750 | -21 |
| Guadeloupe | 1 090 | 1 080 | -1 |
| Guatemala | 740 | 550 | -26 |
| Guyana | 1 350 | 1 000 | -26 |

Table XV.3 (continued)

| | 1970 | 1985 | Per cent change |
|---|---|---|---|
| Developing countries or areas | | | |
| Haiti | 540 | 240 | -56 |
| Honduras | 940 | 1 010 | 7 |
| Jamaica | 1 270 | 820 | -35 |
| Mexico | 1 790 | 1 190 | -34 |
| Nicaragua | 1 250 | 1 380 | 10 |
| Panama | 1 180 | 850 | -28 |
| Paraguay | 960 | 1 000 | 4 |
| Peru | 390 | 350 | -10 |
| Suriname | 1 040 | 1 660 | 60 |
| Trinidad and Tobago | 1 900 | 1 600 | -16 |
| Uruguay | 1 540 | 1 760 | 14 |
| Venezuela | 1 980 | 1 890 | -5 |
| Average | 1 293.46 | 1 244.62 | -4 |
| Average for developing countries or areas | 930.00 | 1 049.47 | 13 |
| Developed countries | | | |
| United States | 3 650 | 3 270 | -10 |
| Canada | 3 340 | 3 180 | -5 |
| Japan | 2 800 | 3 270 | 17 |
| Austria | 2 330 | 2 560 | 10 |
| Belgium | 2 380 | 1 990 | -16 |
| Bulgaria | 1 920 | 2 410 | 26 |
| Czechoslovakia | 2 330 | 2 550 | 9 |
| Denmark | 1 690 | 2 110 | 25 |
| Finland | 1 870 | 1 720 | -8 |
| France | 1 830 | 2 400 | 31 |
| Germany, Federal Republic of | 2 510 | 2 380 | -5 |
| Greece | 2 320 | 3 640 | 57 |
| Hungary | 2 740 | 3 260 | 19 |
| Iceland | 2 980 | 2 560 | -14 |
| Ireland | 2 980 | 2 560 | -14 |
| Italy | 1 770 | 2 460 | 39 |
| Netherlands | 2 430 | 1 690 | -30 |
| Norway | 2 010 | 1 920 | -4 |
| Poland | 2 900 | 3 300 | 14 |
| Portugal | 1 410 | 1 730 | 23 |
| Romania | 1 750 | 2 110 | 21 |
| Spain | 2 070 | 2 740 | 32 |
| Sweden | 1 620 | 1 660 | 2 |
| Switzerland | 3 470 | 2 960 | -15 |
| United Kingdom | 3 040 | 2 120 | -30 |

Table XV.3 (continued)

| | 1970 | 1985 | Per cent change |
|---|---|---|---|
| Developed countries | | | |
| Australia | 2 900 | 2 720 | -6 |
| New Zealand | 2 570 | 2 510 | -2 |
| USSR | 1 870 | 2 170 | 16 |
| Average for developed countries | 2 410.00 | 2 498.21 | 4 |

Sources: Compendium of Social Statistics and Indicators, 1988 (United Nations publication, Sales No. E/F.91.XVII.6); and Simon Chapman with Wong Wai Leng, Tobacco Consumption in the Third World: A Resource Atlas (Penang, Malaysia, International Organization of Consumers Uions, March 1990).

**Figure XV.6.** Lung cancer mortality ratio for males, by number of cigarettes smoked per day

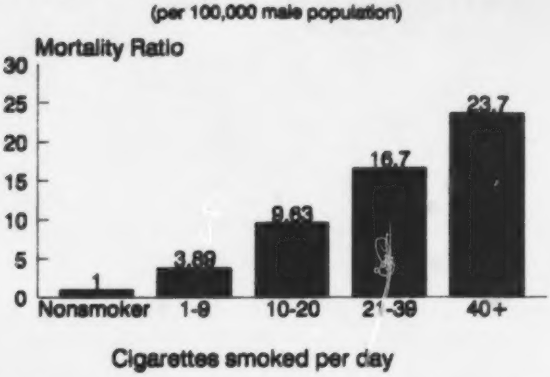


**Figure XV.7.** Lung cancer mortality ratio for males, by degree of inhalation

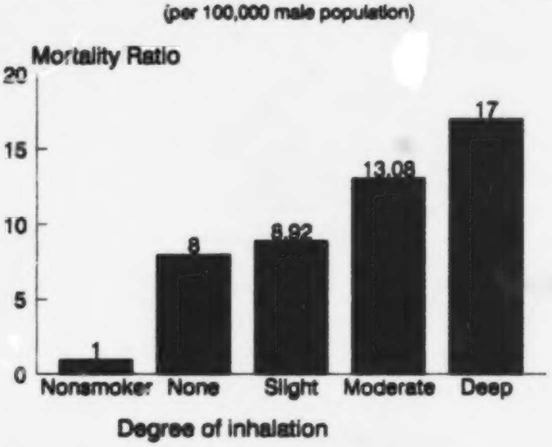
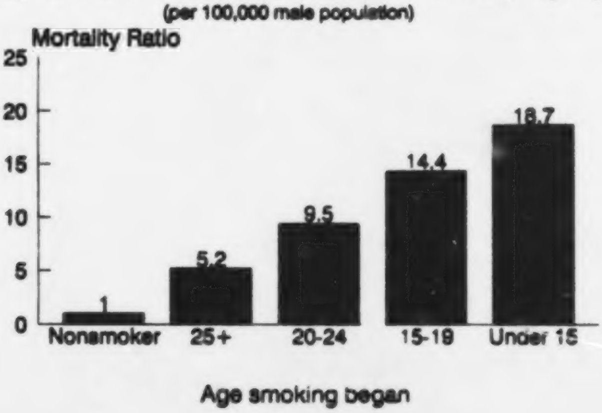


**Figure XV.8.** Lung cancer mortality ratio for males, by age smoking began



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Source: Reducing the Health Consequences of Smoking: 25 Years of Progress, a report of the Surgeon General (Rockville, Maryland, United States Department of Health and Human Services, 1989), p. 45.

Data collected from Canada, the United Kingdom and the United States show that adults in lower socio-economic groups are more likely to smoke than those in higher income groups and that a lower level of parental education is a factor in their children taking up the habit. 15/ Other studies have shown that children of a mother who smokes are themselves more likely to become smokers. Despite laws to restrict advertising and access to tobacco, many young people still see tobacco use as socially acceptable. This tendency is often reinforced by parental habits and glamorization of smoking in advertisements on television and in newspapers.

The number of women smokers has grown rapidly. Whether a woman smokes depends, among other things, on her social and economic background, educational attainments, occupation and the age at which she started smoking. In Greece and Spain, smoking among women is still increasing. In Finland, there was a slight increase in the late 1980s. On current trends, there will be more female smokers than male by 1996. 16/ However, there has been a significant decline in smoking by women in Canada and the United Kingdom and a stabilization or even a very slight decrease in Australia and the United States. In Australia and the United States (see table XV.4), men and women are quitting smoking at about the same rate but more young women than men are taking up smoking and the gap between male and female smoking prevalence has closed. 17/ In Spain, virtually all new smokers among women are young. The prevalence of smoking among Spanish women under 45 years of age is of the order of 40-50 per cent, compared with 2-5 per cent among those aged 45 years and over. 18/ In Japan, the proportion of women who smoke increased to about 15 per cent during the early 1980s and it has fallen slightly since then. There are data which show that 12 per cent of girls aged 13-15 years and 26 per cent of girls aged 16-18 years smoke. In Japan, those who leave school earlier tend to smoke more. 19/

In Czechoslovakia, Hungary and Poland, smoking patterns, especially among the urban population, follow those in other European countries. However, in rural areas of these countries, as well as in Bulgaria, Romania and large parts of the former Soviet Union, smoking is less common.

The changing patterns of smoking among girls can be used to predict not only future patterns of tobacco-related morbidity and mortality, but also changes in smoking prevalence in the female population. A survey of school-age children in 1986 in 10 European countries showed that the prevalence of smoking was higher among young women (aged 15 years) than among young men in five of these countries (see table XV.5). Other surveys have shown higher rates of smoking among young women (aged 14-19 years) than among young men in Denmark, Germany and the United States. 20/

Cigarette smoking is generally a male habit in developing countries, except in India, Papua New Guinea and Nepal. In general, about 5-10 per cent of women smoke; in some areas, as high as 25 per cent, with a few relatively isolated examples of 80 per cent. 21/ Social proscriptions against smoking by women were found to be common, often being linked to more general proscriptions on female behaviour. Women in developing countries often see smoking as a sign of liberation from these restrictions, as did women in developed countries in the early part of the twentieth century.

## Table XV.4. Prevalence of cigarette smoking in five developed countries

| Country | Year | | | | | | |
|---|---|---|---|---|---|---|---|
| Australia a/ | 1964 | 1969 | 1976 | 1980 | 1986 | 1989 | |
| Men (%) | 58 | 45 | 40 | 40 | 32 | 30 | |
| Women (%) | 28 | 28 | 31 | 31 | 29 | 27 | |
| Canada b/ | 1965 | 1970 | 1975 | 1981 | 1983 | 1985 | 1989 |
| Men (%) | 61 | 65 | 51 | 44 | 41 | 36 | 33 |
| Women (%) | 38 | 38 | 38 | 35 | 34 | 32 | 30 |
| Finland | 1965 | 1971 | 1975 | 1980 | 1985 | 1989 | |
| Men (%) | 57 | 44 | 40 | 37 | 35 | 34 | |
| Women (%) | 14 | 16 | 17 | 16 | 17 | 20 | |
| United Kingdom a/ | 1965 c/ | 1972 | 1976 | 1980 | 1984 | 1988 | |
| Men (%) | 68 | 52 | 46 | 42 | 36 | 33 | |
| Women (%) | 43 | 41 | 38 | 36 | 32 | 30 | |
| United States d/ | 1965 | 1970 | 1976 | 1980 | 1983 | 1987 | 1988 |
| Men (%) | 50 | 44 | 42 | 38 | 35 | 32 | 31 |
| Women (%) | 32 | 31 | 31 | 29 | 29 | 27 | 26 |

Sources: Claire Chollat-Traquet, *Women and Tobacco* (Geneva, WHO, 1992), and WHO country database.

a/ Data refer to prevalence of daily smoking at 16 years of age and above.

b/ Data refer to prevalence of smoking at 15 years of age and above.

c/ Including all forms of smoking.

d/ Data refer to prevalence of regular smoking.

## Table XV.5. Prevalence of smoking among 15-year-olds in 10 developed countries

(Percentage)

| Country | | Smoke daily | Smoke weekly | Smoke less than weekly | Do not smoke (have tried) | Have never smoked | Number of subjects |
|---|---|---|---|---|---|---|---|
| All countries | Boys | 15.0 | 4.4 | 6.5 | 39.9 | 34.2 | 5 754 |
| | Girls | 13.8 | 5.6 | 8.0 | 36.2 | 36.3 | 5 934 |
| Austria | Boys | 11.8 | 6.5 | 10.3 | 43.3 | 28.2 | 476 |
| | Girls | 13.1 | 7.1 | 11.8 | 39.1 | 28.9 | 381 |
| Belgium | Boys | 16.6 | 5.0 | 5.1 | 32.7 | 40.6 | 603 |
| | Girls | 13.5 | 6.2 | 5.6 | 29.4 | 45.3 | 502 |
| Finland | Boys | 29.1 | 6.3 | 6.3 | 39.9 | 18.4 | 539 |
| | Girls | 20.1 | 7.4 | 10.1 | 36.8 | 25.6 | 543 |
| Hungary | Boys | 20.4 | 5.9 | 8.2 | 39.9 | 25.4 | 562 |
| | Girls | 14.1 | 6.8 | 8.2 | 42.2 | 28.7 | 704 |
| Israel | Boys | 5.7 | 3.5 | 3.5 | 30.9 | 56.4 | 402 |
| | Girls | 4.1 | 3.4 | 6.3 | 21.3 | 64.9 | 559 |
| Norway | Boys | 16.2 | 4.1 | 9.1 | 43.2 | 27.4 | 627 |
| | Girls | 17.6 | 6.3 | 14.4 | 35.6 | 26.1 | 568 |
| Scotland | Boys | 14.7 | 2.6 | 3.6 | 39.8 | 39.2 | 771 |
| | Girls | 15.6 | 4.5 | 6.7 | 40.0 | 33.3 | 711 |
| Sweden | Boys | 8.7 | 5.7 | 7.6 | 47.0 | 31.1 | 541 |
| | Girls | 10.9 | 5.6 | 7.1 | 37.6 | 38.8 | 521 |
| Switzerland | Boys | 9.5 | 3.6 | 10.2 | 35.8 | 40.9 | 279 |
| | Girls | 10.5 | 4.4 | 11.3 | 29.3 | 44.4 | 341 |
| Wales | Boys | 13.1 | 2.4 | 4.4 | 41.9 | 38.2 | 954 |
| | Girls | 15.1 | 5.2 | 4.4 | 41.2 | 34.1 | 1 104 |

Sources: Claire Chollat-Traquet, Women and Tobacco (Geneva, WHO, 1992); WHO country dababase; and WHO Cross-national Study on Children's Health Behaviour.

Tobacco consumption is increasing in rural areas of some developing countries. In China, in rural areas (80 per cent of the Chinese people live in rural areas) two thirds of the male population smoked in 1984. More recent surveys indicate that smoking by farmers has been rising at about 1 per cent per year and that as many as 80 per cent may be smoking by the end of this century in the absence of preventive intervention. 22/ Far fewer women (7 per cent) smoke; in some rural areas the figure is increasing.

The low level of tobacco use in some developing countries is not necessarily due to knowledge of health consequences but is often a result of social tradition or lack of money to buy tobacco products. The more developed areas of a country often show higher smoking rates than the less developed areas.

It is evident that the consumption of tobacco rises with income unless kept down by better education and government regulation. Both formal education and information on the consequences of prolonged exposure to tobacco smoke are essential ingredients to discourage smoking. Emulation of adult male behaviour has been a powerful stimulus to smoking. Advertisements glamorizing smoking have promoted the smoking habit. Many Governments both at the central and local levels have banned smoking in certain restricted areas, prohibited the sale of cigarettes to minors and provided warning to the public at large. Where activities related to tobacco are economically significant Governments have faced a dilemma because a decline in tobacco industries would destroy the livelihood of many. Where Governments depend on taxes on tobacco to any significant extent, the problems are compounded.

## B. Economic and social consequences

### 1. Narcotic drugs

Narcotic drugs entice, captivate and ultimately destroy people from all walks of life. They are an epidemic which has invaded the home, the workplace, educational institutions and the community, affecting individuals of all classes and ages, especially young people. Millions of young people around the world abuse drugs daily. The deterioration of life in city centres in developed countries, the emergence of large new urban centres in developing countries, changes in family structure and the rapid growth in young populations have added a new dimension to the problem and introduced new risks. Most drug use begins at adolescence or even earlier. In some developed countries, the average age for first marijuana use is 12 years and it is not unheard of for a 9-year-old to begin abusing drugs. 23/ Drug abuse at this stage interrupts the normal maturing process and some of the damage may become irreversible. The simultaneous consumption of more than one narcotic drug, frequently in combination with alcohol, complicates detoxification and the treatment of addiction. Intravenous drug abuse is even more lethal because of the risk of HIV infection and hepatitis B.

The main criteria for measuring drug-related health problems are excess mortality and morbidity. Mortality and morbidity are consequences of complex interactions involving a wide range of factors, such as the combination of drugs used, access to and utilization of health services by drug users, the nutritional habits and status of drug users, the ways in which drugs are administered, the quality of the social network and the social integration of drug users. Apart from its direct effects on health and life expectancy, drug abuse is associated with other problems. The risk of suicide increases with all forms of drug dependence except tobacco smoking.

Substance abuse is also related to high rates of delinquency. Multiple drug users in Switzerland show a sharp 300 per cent increase in delinquency after the onset of abuse. 24/

The production, distribution and consumption of narcotic drugs, in part because they are illegal, adversely affect political institutions and, in producing countries, the environment. 25/ During the past decade, Colombia has been the victim of a calculated reign of terror unparalleled in the Western hemisphere. 26/ More than 200 judges have been assassinated. The narco-traffickers' penetration of the Colombian Government and military is a big part of the problem. The drug barons, perhaps the most sophisticated urban terrorists, have also used money to buy silence or connivance. Close to 80 per cent of the police force of Medellin City are on the drug barons' payrolls, according to Colombian authorities. In 1987, an estimated 500 other Colombian police officers were under investigation. 26/ Organized crime associated with the sale of illegal drugs and the vast financial profits linked to trafficking may even pose a threat to the national security of some countries.

Land used for coca growth by slash-and-burn techniques has been subject to heavy erosion. Rivers and streams have been contaminated with toxic chemicals used for the manufacture of opiates and cocaine. According to Fedesarrollo, a Bogota-based economic research group, Colombia's development has been seriously inhibited by the dominance of the Medellin drug cartels. Over 80 per cent of the drug lords' profits are invested abroad. 27/ The unrestricted capital flows across national boundaries have enabled narco-entrepreneurs to launder their profits in international banks and avoid government detection.

The production and sale of drugs has assumed critical importance in the Andean economies of Bolivia, Colombia and Peru. Coca production, the single source of income for millions of peasants, represents a considerable share of the gross national product (GNP) of these countries and is a major export earner. The annual value of trade in illegal drugs is reported to exceed that of trade in oil, which is about $200 billion. 28/ In some countries in the Latin American and Caribbean region, returns per hectare from narcotic crops can exceed more than 10 times those from alternative agricultural products. 29/ In Pakistan, gross returns from growing opium were reported as 3,500 rupees per acre, compared with 500 rupees from maize. 30/ Endemic poverty in producing countries, exacerbated by natural disasters, a decline in commodity prices and economic crises, have all contributed to making the growth of coca leaves and opium plants a highly paying proposition.

In 1990, the value of recorded production in Bolivia was at least equal to its recorded gross domestic product (GDP). 31/ Income from drugs has become the mainstay of an economy in crisis and coca growing has become the principal source of employment. According to the Government of Bolivia, 50,000 families and 10 per cent of the economically active rural population depend on coca cultivation for their livelihood. Other sources put the figure as high as 70,000 families. Wages in the drug industry in some countries are thought to be about 10 times higher than earnings for comparable work in the rest of the economy. 32/

## 2. Alcohol

Alcohol is a central nervous system depressant much like morphine and heroin. 33/ It induces a state of euphoria and releases inhibitions. In large amounts, it reduces mental alertness and impairs body coordination. Studies in individual countries over time and comparative studies in different countries and regions have demonstrated the extensive damage of alcohol to the body, which eventually results in brain deterioration, liver cirrhosis and heart damage. High consumption of alcohol is associated with accidents on the road and at work. 34/ It is estimated that there are 50,000 alcohol-related deaths in France each year. 35/ In the former Soviet Union, morbidity due to alcohol consumption increased with the increase in alcohol consumption. In the age range 15-49 years, the death rate of males exceeded that of females. 36/ In the former Soviet Union in the 1980s, some 60,000 traffic accidents occurring annually were associated with alcohol abuse. 37/

Alcohol abuse is associated with accidents and intentional violence, resulting in violent death. 38/ In the United States, in 1990, more than 65,000 lives were lost on account of alcohol abuse, 22,000 of them on highways. 39/ Over the past 20 years, alcohol-related traffic accidents have been identified as of primary importance among the social and health problems linked to drinking. 40/ Violent crimes are also associated with alcohol abuse. In the Soviet Union, most acts of hooliganism and two thirds of murders and violent crimes were committed by people who were intoxicated. 41/ Drunk-driving offences have increased substantially. The statistics, however, reflect not only an increase in incidence, but also improvements in enforcement activities. There is an international trend towards a larger and faster increase in fatal as opposed to non-fatal alcohol-related accidents. In the United States, alcohol-related deaths were 5 per cent of the total in 1987. Suicides among alcoholics are much higher than among others. 40/

Alcohol consumption also had severely adverse effects on family relations. Alcohol taken by a pregnant woman can damage the developing brain in the fetus and impair placental functions as well. Fetal alcohol syndrome in babies is a fairly common problem in Europe and North America. Less visible is the erosion of self-esteem, family ties and career potential that occurs as a person succumbs to alcoholism, often marked by compulsive, uncontrollable drinking.

Costs of alcohol abuse include resources expended to prevent such abuse and to ameliorate its negative consequences. These costs arise in connection with alcohol treatment programmes, medical care, social welfare programmes, the criminal justice system and lost output. Among these, lost output dominates. In the United States, lost production in 1980 was about 3 per cent of total wages and salaries. 42/ In the 1980s in the former Soviet Union, each rouble gained by the Government was matched by 1.5 to 3 roubles lost, a loss due to absenteeism and decline in labour productivity attributed to alcohol-related accidents and occupational traumas. 43/

Alcohol beverage industries (brewing in particular) can develop rapidly, even in countries with no industrial tradition. Access to the technology of brewing, distilling and wine production is relatively easy, the capital investment required is not large and, given a suitable agricultural base, the raw materials are available locally in many regions of the world. The availability of alcoholic beverages is likely to continue to increase and to spread around the world, bringing concomitant increases in alcohol-related health problems and associated social costs. 36/

The alcohol industry is not of much weight in any of the developed market economies. In France, which has both high consumption and high exports of wines and spirits, the value of wine production in 1988 was 38 billion francs, less than a quarter of the value of total agricultural output and less than 1 per cent of GDP that year. 44/ Employment in the French alcohol beverage manufacturing industry in 1987 was about 30,000 persons. There are a few countries whose exports of alcoholic beverages amount to 4 per cent of total exports but the proportion is under 1 per cent for the majority. 44/ Portugal and France and, to a lesser degree, the United Kingdom and Spain are significant exporters of alcoholic beverages.

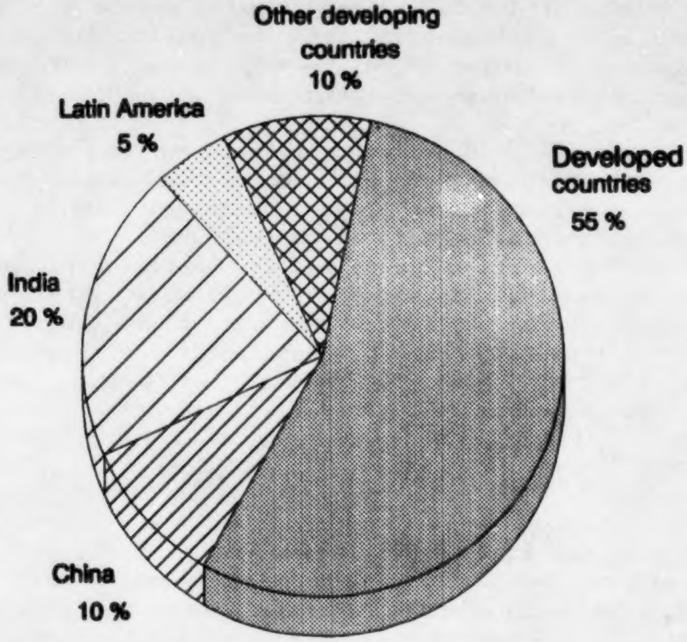
### 3. Tobacco

Cigarette smoking has been identified as a major avoidable cause of ill-health and premature death. The World Health Organization estimates that in the 1990s tobacco will cause about 3 million deaths per year in the world, 55 per cent of which will occur in developed countries. Comparable figures are 10 per cent in China, 20 per cent in India, 5 per cent in Latin America and 10 per cent in other developing countries (see figure XV.9). In developed countries, where cigarette smoking has been common for several decades, about 80-90 per cent of lung cancer, 80-85 per cent of chronic bronchitis and emphysema and 20-25 per cent of deaths from heart disease and stroke are attributable to smoking.

In developing countries, where cigarette smoking has been of much shorter duration and lower intensity, morbidity and mortality due to smoking are likely to be proportionately lower. However, producers of tobacco products, including the large multinational tobacco companies, find these large populations with rising incomes highly remunerative new markets. Massive increases in cigarette consumption over the past two decades, discussed earlier, can be expected to lead to a rapid increase in mortality from smoking-related diseases in developing countries. Some 2-3 million deaths a year are projected in China alone during the 2020s, about 1 million from lung cancer, if current smoking trends continue. 45/ In addition, the reduced oxygen-carrying capacity of blood caused by the carbon monoxide in cigarette smoke, along with the effects of nicotine, are likely to be far more injurious to the health of the unborn child in poor countries, where anaemia among women is widespread.

Smoking is hazardous to the non-smoker as well. In developed countries, tobacco smoke is the most common pollutant of indoor air and is usually present at higher concentrations than other air pollutants. Unlike homes, which usually rely on random ventilation, workplaces (factories or offices) are frequently equipped with complex ventilation systems. The workplace is

Figure XV.9. Estimates of tobacco-related mortality for the 1990s



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Source: Tobacco Alert (Geneva, WHO, April 1990).

thus often the place of greater exposure to cigarette smoke by non-smokers. Consequently, there have been measures on a wide scale to ban smoking in the workplace. In the United States, for example, it was expected that of the top 50 companies from the Fortune 500, more than half would significantly restrict smoking in the workplace by the end of 1991. 46/

Tobacco farming and manufacture can have severely adverse consequences for the environment. Cigarettes are voracious users of paper and forest resources. 47/ A far less obvious but much more severe cause of deforestation is the use of fuelwood in the curing of tobacco leaf. In developing countries and those without coal deposits, wood is the main fuel used. In the United States, the world's second largest producer, little or none of the crop is cured by fuelwood, while in Brazil (the fourth largest producer) the entire crop is cured by burning wood, as in most of Africa, India, Thailand and the Philippines. 48/ The best estimate is that fuelwood curing requires about one tree for curing tobacco for 300 cigarettes.

In addition, tobacco depletes soil nutrients at a higher rate than many other crops. 49/ Consequently, soil needs to be either enriched with the regular input of chemical fertilizer or allowed to lie fallow for one or two years. Tobacco plants also require persistent applications of pesticides and herbicides throughout their growing season. Residuals from chemicals, which are toxic and sometimes carcinogenic, readily find their way into water supplies. Tobacco is an important cash crop in several countries. In 1985, 4.1 million hectares of land throughout the world were under tobacco cultivation, 73 per cent of which were in developing countries. 50/ Tobacco occupies three hectares of every thousand hectares or 10.3 per cent of the world's arable land. In comparison, coffee occupies 0.7 per cent, cotton, 2.3 per cent and wheat, 16.3 per cent. In some countries, gross returns per hectare on tobacco are normally five times those on maize and three to four times those on cotton and groundnuts. 51/

The growing, manufacture and distribution of tobacco create a great deal of employment. The total full-time and full-time equivalent employment figure in 69 tobacco-growing countries was 18.2 million in 1983. 52/ Of this, 11 million were employed in growing (half of this number in China alone), 5.3 million in green leaf processing and manufacturing and 1.9 million in distribution. An additional 8 million were employed in industries supplying materials to the industry (harvesting tools, paper, transport). In the European Community, 215,000 workers were employed in tobacco growing and some 200,000 hectares were under cultivation.

Taxes on tobacco are a significant source of revenue to Governments in several countries. Revenue from taxes on tobacco ranged from 0.2 per cent to 41.3 per cent of total central government revenue in developing countries. The highest shares were in Haiti (41.3 per cent), Zaire (26.3 per cent), Argentina (22.5 per cent), Sri Lanka (17.9 per cent), Malawi (16.7 per cent) and the United Republic of Tanzania (16.3 per cent). Table XV.6 shows the tobacco excise tax as a percentage of total government revenue for some selected countries for the latest year available.

Table XV.6. Excises on tobacco as a percentage of total revenue for selected countries, latest year

| Country | Latest year | Total revenue (millions of local currency) | Excises on tobacco (millions of local currency) | Percentage |
|---|---|---|---|---|
| Cyprus | 1990 | 706.42 | 13.09 | 1.9 |
| India | 1986 | 420 700.00 | 16 100.00 | 3.8 |
| Indonesia | 1989 | 29 093 000 | 1 392 000 | 4.8 |
| Iran (Islamic Republic of) | 1989 | 36 248 000 | 71 300 | 0.2 |
| Morocco | 1987 | 37 089 | 2 040 | 5.5 |
| Sierra Leone | 1989 | 3 693.9 | 567.3 | 15.4 |
| Sri Lanka | 1991 | 71 529 | 6 550 | 9.2 |
| Thailand | 1990 | 404 556 | 13 333 | 3.3 |
| Zaire | 1989 | 391 399 | 12 042 | 3.1 |

Source: Government Finance Statistics Yearbook, 1991 (Washington, D.C., International Monetary Fund, 1991).

## C. Policy considerations

### 1. Demand reduction

The large variety of drugs and patterns of abuse and the complexity of the economic and social context of drug producers and consumers call for a corresponding variety and sophistication in approaches to corrective measures. Collaboration among Governments, international agencies and non-governmental organizations is an essential part of these measures.

One set of policies is aimed at reducing the demand for alcohol, tobacco and narcotic drugs. Measures to increase public awareness of the health, social and economic ill effects of the use of these substances play a prominent role here. 53/ There are also measures to improve living conditions and to enlarge opportunities for and expectations of young people with regard to rehabilitation, treatment, counselling and social reintegration. Alcohol and narcotic drugs are also a means of coping with deprivation, frustration, poverty and hard conditions of life. Limited access to opportunities for education, employment, status and social acceptance has been associated with drug abuse in various circumstances. Alcohol and drug abuse may also be the only leisure activity available to many of the abusers. The main means of preventing the adoption of these habits is to identify factors responsible for the development of problems and to intervene in order to mitigage or eliminate them.

Higher prices tend to reduce the consumption of all these substances. Higher taxes on alcohol and tobacco not only yield revenue but also reduce consumption. 54/ In recent years, many large corporations in the United States have established programmes to reduce alcoholism among their employees. 55/ Similarly, in the former Soviet Union, President Gorbachev's anti-drink campaign was designed to correct high rates of absenteeism and accidents on the job. 56/ Further, higher tax revenue can be used to finance curative and counselling services to help remove addiction and improve the conditions of addicts. However, there are limits to the extent to which Governments can impose taxes. The higher the tax, the greater the incentive for selling the commodity illegally to evade the tax and the higher price. Similarly, there is a point beyond which government may be defeating its purpose of maximizing tax revenue because sales subject to tax will fall rapidly with higher rates of tax.

The regulation of promotional campaigns for alcohol and tobacco is another method used to reduce their consumption. In some 50 countries, cigarette advertising is restricted or prohibited. In 21 of these countries, there is a ban on advertising all tobacco. 57/

At the international level, the World Ministerial Summit to Reduce the Demand for Drugs and to Combat the Cocaine Threat, held in London from 9 to 11 April 1990, accorded the same importance to reducing the demand for drugs as to reducing the illicit supply. The main aim of the Summit was to increase the international commitment to reduce the demand for all drugs and to identify ways in which international cooperation could most effectively be targeted to combat the production and trafficking of cocaine. Developed countries were expected to increase technical cooperation, bilaterally or through the United Nations, with developing countries assisting them in devising and implementing the required programmes. The Summit recommended that national strategies in the health, social, education and legal fields, as well as in the criminal justice system, should contain programmes for the prevention of drug abuse and the treatment, rehabilitation and social reintegration of drug abusers and drug-addicted offenders.

### 2. Control of production and trafficking

Measures to control the production, supply and availability of alcohol, tobacco and narcotic drugs have taken many forms. These range from total prohibition to limits on the production and marketing of alcoholic beverages and tobacco products. 58/ The consumption, production and sale of alcoholic drinks are totally prohibited in many countries including the Islamic Republic of Iran, Kuwait, the Libyan Arab Jamahiriya, Qatar, Saudi Arabia and Yemen, all of which have done so on the basis of Islamic teachings; in others, a prohibition exists during short periods, for instance, during elections, important football games or market days. There are controls restricting hours for the sale of alcohol in many countries.

Harsh punitive measures against traffickers are another means of limiting availability. In China, the amount of heroin seized doubled in 1991. In the Islamic Republic of Iran, in the first three months after a tough new anti-drug law took effect, 356 smugglers were executed. 59/ The death penalty for dealing in drugs is in force in Malaysia, Mauritius and Singapore. Some penalties, including the forfeiture of assets of those convicted of drug trafficking, have come into force in the United States of America. On a bilateral level, the United States cooperates with several producing developing countries to eradicate illicit drug production and to fight trafficking and money laundering.

The debate over the legalization of currently illegal drugs has continued. Arguments for the prosecution of producers and distributors of narcotic drugs rest on the observed harm that drug abuse causes individuals and their immediate associates and the expectation of the harm that widespread abuse of drugs may cause society. 60/ Laws prohibiting drug production, transport and possession have, however, brought forth enormous problems of law enforcement and the allocation of large resources both to enforce laws and to maintain those incarcerated. Well-known criminal organizations have profited by running distribution networks. Market prices have been raised to inordinately profitable levels, providing strong incentives to supply the market, despite the risk of conviction. High profits, in turn, have made it feasible for dealers to subvert the law and enforcement procedures with bribery and terrorism. It is worth noting that the impact of information, education and penal action so far does not seem substantial.

One proposal, which aims at dealing with some aspects of the problem from both perspectives, is that of seeking the intervention of the medical profession. Under certain conditions, physicians would prescribe to addicts supplies of unadulterated drugs together with sterile equipment. The risk of spreading infectious diseases would thus be eliminated, the demand on the black market would be reduced and drugs would not be available to potential new users. As profits from drug dealing declined, the number of pushers would fall and drug-related crime might become less prevalent. The message that illicit drugs are dangerous and should not be taken casually and that people who do so should be treated as sick and deviant would also be reinforced. The proposal has not been widely accepted, however, mainly because of problems of implementation.

### 3. International measures

The legal framework for international cooperation to fight against drug abuse, production and trafficking has been established in the main drug control treaties: the Single Convention on Narcotic Drugs of 1961, 61/ that Convention as amended by the 1972 Protocol, 62/ the Convention on Psychotropic Substances of 1971 63/ and the United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances of 1988, 64/ which entered into force in November 1990. As of 10 February 1992, 106 States had become Parties to the Single Convention or the Convention as amended, 106 States to the 1971 Convention and 57 States and the European Economic Community to the 1988 Convention. The United Nations General Assembly, at its seventeenth special session, in February 1990, adopted a Global Programme of Action for international cooperation against illicit production, supply, demand, trafficking and distribution of narcotic drugs and psychotropic substances. 65/

## Notes

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# Chapter XVI

## CONCLUSIONS

As fears of global confrontation between opposing ideological and military camps receded during the past few years, international attention was increasingly drawn to the objectives of higher standards of living and economic and social development. The present report has analysed, in varying degrees of detail, the extent to which these objectives had been achieved at the beginning of the 1990s. It has highlighted major improvements in social conditions, drawn attention to the difficulties in improving social conditions in the difficult economic circumstances of the 1980s, described emerging situations and discussed a wide variety of policies adopted by Governments and international organizations in response to those situations. These findings gain significance in the light of the decision of the General Assembly, in resolution 47/92 of 16 December 1992, to convene a World Summit for Social Development at the level of heads of State or Government early in 1995.

The General Assembly decided that the core issues affecting all societies to be addressed by the Summit were (a) the enhancement of social integration, particularly of the more disadvantaged and marginalized groups, (b) the alleviation and reduction of poverty and (c) the expansion of productive employment.

These core issues are overlain by many others, which are identified in the decision on the objectives of the Summit set out in paragraph 5 of the resolution. These other issues concern the balance between economic efficiency and social justice; the interaction between the social function of the State, market responses to social demands and the imperatives of sustainable development; the equalization of opportunities for all members of society; the more effective delivery of social services for the more disadvantaged sectors of society; and the mobilization of resources for social development at the local, national, regional and international levels. The findings of the present report bear directly on all these issues.

Poverty still afflicts some one fifth of the people of the world, almost all of them in developing countries. Rapid sustained economic development has reduced poverty in some of these countries. In others, highly effective redistributive policies have alleviated poverty. In yet others, poverty has increased in both extent and intensity. Negative and slow economic growth is a major contributor, as are civil wars and the breakdown of orderly government. Natural disasters in economies without an adequate physical infrastructure to mitigate the severity of disasters and without social safety nets to protect survivors from consequent deprivation have increased the extent and deepened the intensity of poverty. Processes of economic adjustment necessitated by delays in recognizing changes in the world economy, rapid changes in technology, erroneous economic policies and revolutionary changes in the basic institutions of society have also contributed to poverty, at least in the short term. Severe restrictions on fiscal budgets have limited the capacity of Governments to extend and strengthen safety nets to alleviate poverty.

Rapid and sustained economic development is an essential condition for the reduction of poverty. Programmes of poverty alleviation maintained over several decades have become constrained by slow economic growth. Continued expansion of exports from the affected economies is necessary so that they can import both equipment and technology. It is also necessary that patterns of development permit the integration of marginalized and disadvantaged groups.

An essential feature of those patterns of growth is that they create opportunities for more productive employment. Social safety nets, whether extended by Governments or international organizations, are by their very nature short-term means of reducing deprivation. The expansion of productive employment requires investment in infrastructure, equipment and human resources.

Societies which over a sustained period of 30 or more years have invested some 30 per cent or more of their GDP in capital formation and raised the quality of their labour force by improving its health and education, have generally reduced poverty. The overwhelmingly large proportion of those investments has come from domestic resources; foreign investment has helped by supplementing the total, by bringing in products otherwise unavailable to the economy and, most important, by introducing new technology. The availability of foreign investment will contribute significantly to the pace at which investment takes place and productive employment is created.

There are several major objectives which the Summit might be expected to achieve. First, the event itself would highlight the importance of these issues to the international community, the political leadership of countries and the world public at large. The intensity of that highlighting will depend on the attention paid by the political leadership to the Summit and the extent to which the world public can be made to participate in its proceedings. In that connection, the many non-governmental organizations active in social development and the news media that report on these issues have much to contribute.

Secondly, the Summit could consider social development issues in the light of the new economic and political realities of the world. In Africa and Latin America social development problems have accumulated as a result of slow growth. The scarcity of public sector resources has cut down on social services which had previously been available. Leaner government implies withdrawal from social sector activities which benefit particular groups of people. The use of market instruments for the delivery of social services has created new situations, the implications of which have not been wholly understood. In order for the Summit to come to conclusions on these questions, it is essential to elaborate the consequences of these new considerations for social development policy and discuss them as widely as possible before the Summit takes place.

Thirdly, the Summit could assess priorities for social development in policy formulation, for it is clear that policy mediation is a powerful determinant of social conditions. Priorities attached to social development differ among countries. For the Summit to make such an assessment it would be necessary to examine the differences in priorities and explain them in economic and sociological terms.

Fourthly, the Summit could evaluate the efficiency of alternative policy instruments, especially in view of the widely prevalent tendency to favour market-based instruments. Since a major issue in social development is that of integrating marginalized and disadvantaged groups, policy instruments would have to meet the requirements. Given the wide variations in the capacity of countries to fashion such policy instruments, it would be necessary to assess them in the light of those variations. Studies of the nature, efficiency and effectiveness of a wide variety of such instruments would be required.

Perhaps the most difficult issue before the Summit would be that of social disintegration. Understanding the underlying causes of such conflicts and the means of bringing about reconciliation would require extensive studies and consultations.

Finally, it is primarily domestic organizations that respond to social development issues. However, international voluntary organizations and intergovernmental organizations have been more active in these areas than in any other comparable area. The Summit could be the occasion to bring forth the relative strengths of these separate organizations and to seek means of pooling their strengths.

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